

PACIFIC PULP *and* PAPER INDUSTRY

Volume 1
Number 7

AUGUST, 1927

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Aerial Photo, Portland, Ore.

ASTORIA, OREGON
pulp projects are planned for this city at the mouth of the Columbia River. The arrow at the right indicates the site of the Northwestern Pulp & Paper
At the left is the Astoria Box & Paper Co. The Port of Astoria's excellent docks are shown in the foreground.

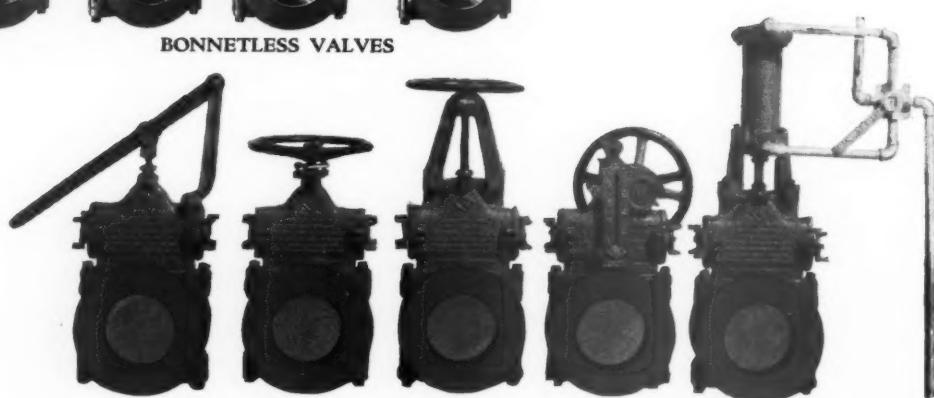
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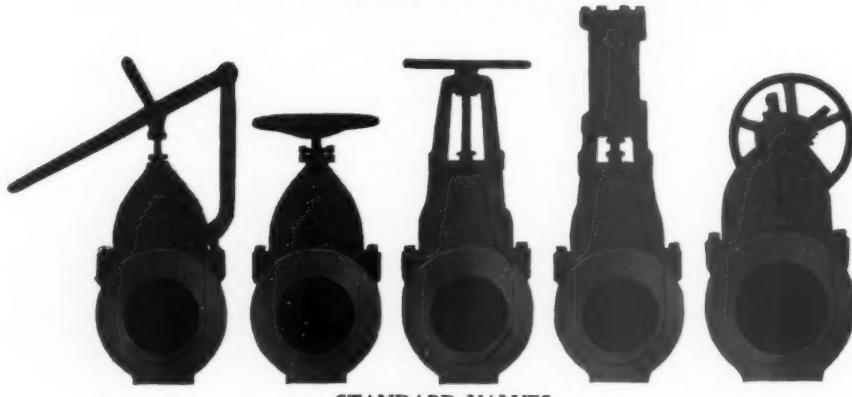
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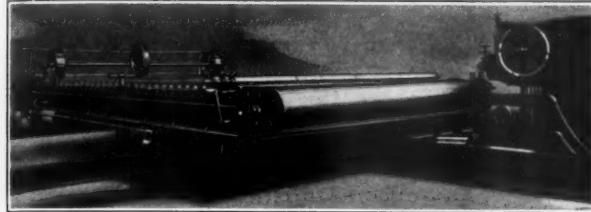
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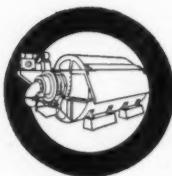
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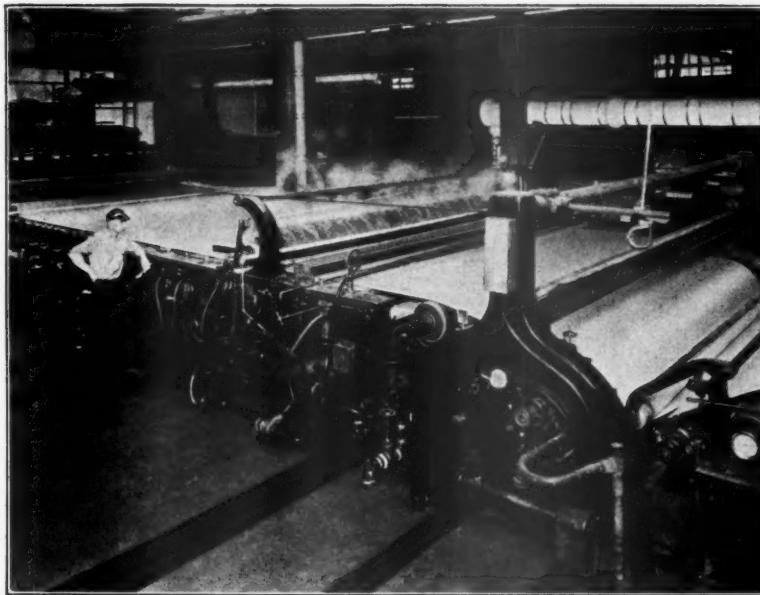
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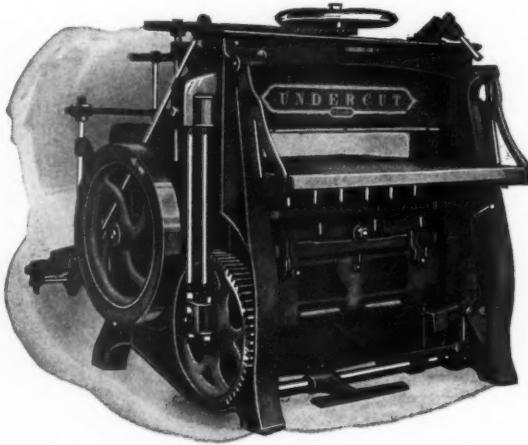
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Vol. 1

AUGUST, 1927

Number 7

Shaffer to Build Pulp Mill

Box Factory Will Increase Capitalization and Add Pulp Unit at Tacoma

TACOMA, Washington, moves into new prominence as a coming pulp and paper manufacturing center with the announcement of President Ralph H. Shaffer that the Shaffer Box Company will construct a fifty-ton sulphite mill in conjunction with its large box shook factory on the Hylebos water way on the Tacoma tide flats.

It has been known that the Shaffer mill has been studying the pulp industry for many months seeking an outlet for the great quantity of waste from its mill. Fred C. Brewer, vice-president of the box company, states that the mill has been cutting about ninety per cent hemlock and ten per cent spruce. Much of the waste has been shipped to other pulp plants in the Northwest. The present move of the Shaffer company is therefore only a step toward making use of this waste directly. It will also mean practical elimination of the huge burner now costing several thousand dollars each year to dispose of saw mill waste.

Pulp Unit Will Stabilize

The addition of the pulp mill, it is believed, will form an excellent combination with the box shook plant and stabilize the business, permit the enlargement of markets, and reduce the cost of production. The mill will be able to cut only the best material for box shooks and divert the poorer grades to pulp.

Mr. L. A. DeGuere, pulp and paper mill engineer, of Wisconsin Rapids, Wisconsin, has been assisting the Shaffer box interests in studying their particular problem. Mr. DeGuere is also engineer of the Tumwater Paper Mills, now nearing completion at Tumwater, Washington. Other installations engineered by Mr. DeGuere in the United States and Canada will make a creditable list.

Mr. DeGuere has been commissioned to draw the plans for the Shaffer mill and is now in Wisconsin on

that mission. He is expected to return to Tacoma during the latter part of August. Actual construction will begin at an early date and manufacture of pulp will begin about eight months later, it is expected. Mr. DeGuere has interested himself financially in the project and will give the plant his personal supervision.

The plans for the pulp mill call for two digesters of 15 feet by 49 feet size. All the machinery of the



RALPH H. SHAFFER

PACIFIC PULP & PAPER INDUSTRY

plant will be new. The mill will face on Taylor Avenue. The Shaffer Box Company has twenty-one acres extending from Taylor Way to Hylebos Waterway, served by two spur tracks of the municipal belt line, which gives connection to all four transcontinental rail lines entering Tacoma. The plant will cost about \$500,000. The plans will be drawn so as to allow of doubling of the capacity without disturbing the first unit.

The large supply of water required for pulp mill operation will be supplied by the city of Tacoma, which not only has now in operation a well within a short distance of the Shaffer mill, pumping 1,250,000 gallons per day, but contemplates the early construction of a large water main to utilize the waste spill from the Hood Street reservoir. City power at low rates will also be available for the new mill.

The capital of the Shaffer Box Company is being increased from \$400,000 to \$1,250,000 to take care of the pulp mill addition. Ralph H. Shaffer, who, during seven years connection with the box company, has seen its business quadrupled and whose initiative has been responsible for other growing Tacoma institutions, including the Shaffer terminals, is president of the company. Fred C. Brewer, also long a prominent figure in civic and industrial circles of the city, is vice-president and treasurer. R. H. Pangborn is vice-president and general superintendent and E. A. Glueck is secretary.

Huge Cut of Box Shooks

The Shaffer Box Company cut about 40,000,000 feet of box shooks last year. Last year it adopted a system of stacking its lumber for air drying before sending it to the shook saw mill and this has proven eminently satisfactory. Many millions of feet of lumber are continuously stacked in the big yards of the mill, making it one of the striking plants along Hylebos Waterway. It is planned to put in new stackers so that lumber can be piled thirty-six feet high, still further increasing the capacity of the yards.

Financing for this expansion of the Shaffer Box Company is being handled by the Tom G. Taylor Company, with offices in the Puget Sound Bank Building, Tacoma, and Pacific Building, Portland.

Mr. Tom G. Taylor, who heads the finance company, also handled the financing of the St. Helens Pulp and Paper Company kraft mill, at St. Helens, Oregon, and the Tumwater Paper Mills at Tumwater, Washington.

To finance the pulp mill there are 9,000 shares, seven per cent cumulative preferred stock, par value \$100, and 12,000 shares common stock at no par value.

Tom G. Taylor Co. Financing

The Tom G. Taylor Company is offering, subject to prior sale and change in price, the unsold portion of \$900,000 of preferred stock and the unsold portion of 4500 shares at no par value common stock, in units of two shares of preferred stock and one share of no par value common voting stock. The sale price per unit is \$215.00.

The Shaffer Box Company and its predecessor has been operating in Tacoma since 1889. It has an established business with a staple product, its annual output being an average of forty million feet of box shook. The site property has paved highway, street car service, city water main, power lines from Tacoma municipal power plant, and Puget Sound Power & Light Co., and is within a few blocks of the Port of Tacoma docks. The plant, built in 1921, consists of a sawmill, 200,000

feet daily capacity, a box factory of 150,000 feet daily capacity, the average working force consisting of 400 employees with an annual payroll of approximately \$500,000. The plant uses exclusively spruce and hemlock and of necessity produces a large amount of waste which is well suited for pulp.

Mr. DeGuere, after investigating the Shaffer project, reported to President Shaffer as follows:

The most effective combination is such as yours. With such a combination the raw material for the pulp mill can be supplied at low cost, also fuel for steam. You have a workable problem, one that should not only materially increase the profits in your present plant but should bring a profit on pulp product also. Mills in this climate can be built cheaper than in the middle west and the cost of operation of such a plant as you contemplate will be less because of climate conditions.

Kelso May Get Second Mill

Prospect of a second paper mill at Kelso, Washington, is indicated by the announcement that Seattle interests have been conferring with Kelso business men on the matter of site.

Fred G. Statham, sales manager of the West Paper Company, Seattle, and D. J. Albertson, Seattle, asked the Kelso men to grant a practically free site for the erection of a small mill.

A committee composed of A. D. Byram, George H. Norris, and J. Frank Scott, Kelso, was appointed to look into the proposition and later reported that an option had been secured on the old McLane lumber mill. The committee, backed by the Kelso club, is now working out ways and means to satisfy both the promoters of the mill and the Kelso business interests.

Mr. Statham and Mr. Albertson, in a preliminary statement, said that they represent a group capitalized at \$500,000 and propose to build an initial unit costing approximately \$250,000 to manufacture coarse papers. At the time of this writing they could not be reached for confirmation.

The site is said to be one of the several prospective ones considered in Northwest cities. It comprises four and a fraction acres in South Kelso.

The enterprise has no connection with the Kelso Paper Company, which is proposing to build a small paper mill on the site of the Kelso Shingle Company.

Association Seeking More Coast Members

More attention will be paid to the Pacific Coast in the future by the American Paper and Pulp Association, according to Dr. Hugh P. Baker, secretary of the organization, upon the occasion of a visit to the West. Association officials have not contacted the Western mills frequently in the past because of the great distance from Eastern centers and the comparative small number of mills in the West, Dr. Baker stated.

More activity in pulp and paper on the Pacific Coast in the last five years than in any other section of the country puts the West in a new light and will mean frequent visits by association officials, Dr. Baker declared.

W. J. Pilz, assistant manager of the Everett Pulp and Paper Company, Everett, Washington, who is on the membership committee of the association, states that letters have been written to all non-member mills on the Coast endeavoring to get them to join the association.



Relogging Presents a New Field Upon Which the Mechanical Engineer and Practical Logger Must Concentrate

Going After That Forty Per Cent

Engineers and Loggers Between Them Are Developing Suitable Light Equipment That Is Proving Practical and Profitable In Salvaging a Heavy Woods Waste

By ALLEN H. HODGSON

Office of Forest Products, U. S. Forest Service, Portland, Oregon

THE territory lying west of the Cascade Range in Oregon, Washington and British Columbia, known as the Douglas Fir Region, has developed the largest and most powerful logging machinery in the world. Some of the individual units, fully equipped, cost as much as \$70,000 and are capable of yarding and loading on cars more than 100,000 B. F. of logs per day. It takes from 18 to 20 men, some of whom are skilled mechanics, to operate one of these machines. The labor cost alone averages more than \$100 per day.

The construction and use of such huge equipment has been brought about by several factors, chief among which are economic conditions, difficult logging chances and large logs. It is obvious that to make this equipment an asset rather than a liability quantity production is the all-important factor.

The forests in the Douglas fir region are composed of very large trees, many of which contain from 10,000 to 20,000 board feet of lumber to the tree. This timber is, of course, logged and manufactured into lumber, but intermixed with it are trees from ten to twenty inches in diameter. Most of these small trees are western hemlock.

Forty Per Cent Left as Slash

Owing to the present low value of common lumber, it does not pay to take small trees out of the woods with heavy machinery. The under-sized trees, together with broken and defective logs from the larger ones, are therefore left on the ground in the form of slash to rot or to be burned. In some instances the volume of slash left after logging amounts to thirty or forty per cent of the original stand.

Recent months have witnessed rapid expansion in the manufacture of pulp and paper in the Pacific Northwest. A number of additional pulp mills have been built in the Douglas fir region of Oregon and Washington. Sitka spruce, western hemlock and the balsam firs are the tree species found here best adapted for paper pulp manufacture. At present the bulk of the pulp is produced from sawlogs bought in the open log market or in some cases taken from the woods by the pulp company's own logging crews.

Studying Salvage Methods

A few of the pulp mills, and the number is growing, are using spruce and hemlock wood in the form of waste from sawmills and box factories. From the utilization of sawmill waste it is only a step to the great supplies of material suitable for pulp which are left in the woods by the loggers. Already some pulp mills are looking to this source of supply and are becoming interested in machinery by means of which it can be profitably salvaged.

The development of equipment designed to take out small, hitherto wasted, logs and chunks has been given serious attention by only a few men and companies within the Douglas fir region, since such material has had very little, if any, commercial value. The problem has many involved economic and mechanical factors, but as the demand increases more thought will surely be given the subject until a highly efficient system is worked out. It represents a new field upon which the mechanical engineer and the practical logger must concentrate.

Since so little study, based on field application, has been given the matter, it is difficult to say at this time



Photo by Brubaker Aerial Surveys, Portland, Ore.

When the Logger Has Taken Out the Big Timber the Smaller Trees, Mostly Western Hemlock, Are Pulled Down and Left to Be Burned As Slash or to Rot. This Woods Waste Is Estimated As High As Forty Per Cent.

just how the problem will be finally solved. Just now, when increasing attention is being given to present and future supplies of pulpwood, it is of interest to note what is being done by a company which has given the subject more thought than any other within the Douglas fir region of Oregon and Washington.

Crown-Willamette Pioneered

The first attempt at closer utilization in the woods with specially designed equipment was, as far as the writer is informed, in 1923 by the Crown-Willamette Paper Company at its Youngs Bay camp near Astoria, Oregon, when a re-logging operation was started. The re-logging was done with a light skidder purchased for the purpose. Considerable work was done, but this enterprise was dropped on account of changes in administrative plans, which closed down the major operation and moved it to another tract of timber where conditions did not favor re-logging under the original plan. This machine, even though undersized, was found to be too cumbersome to move and set up. It also required such a large crew to operate the machine that the daily wage was disproportionate to its yarding ability when used for logging small logs.

The cause of better woods utilization, however, was not lost with the closing down of this first experiment. Early in 1926 the company, which was at this time

running two camps near Cathlamet, Washington, seriously considered the proposition again, but this time from quite a different angle. It was believed that very satisfactory results could be accomplished through pre-logging, on a contract basis.

The plan was to fall all hemlock, silver fir and spruce trees up to a diameter of 20 inches at the stump, in advance of falling the larger timber. This small timber was to be peeled and bucked into cordwood lengths, bunched together by means of light gasoline machinery and bundled into lots containing about one cord. The bundles were to be held together with small steel cable. They were to be swung on to flat cars, by means of a light skyline operated by a gasoline engine, hauled to the Columbia river, and there loaded on barges by cranes.

Concentrate on Relogging

The pre-logging operation was given up for the reason that at the Bradley camp a large amount of small silver fir (*Abies amabilis*) and western hemlock had been left by the first logging project. To save this small timber, which was well suited for paper pulp, it was necessary to move it at once. The company, therefore, decided to concentrate on re-logging this area, and to drop, for the present at least, the scheme of pre-logging.

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The "High Climber" in the Slash Fields

A part of the original stand of timber at the Bradley camp was logged by the regular high-lead method of steam logging during the winter of 1925 and 1926. This timber consisted chiefly of large western hemlock and silver fir, with a few very large Douglas firs in mixture. The older timber grew in rather an open stand, as a result of which a large number of young hemlock and silver fir, from ten to twenty inches in diameter, had developed as an understory.

With the ordinary methods of logging it was impossible to take out the larger timber without pulling down and breaking the small trees, and the latter could not be handled profitably with the heavy machinery. As a result great quantities of small logs and chunks were left on the ground at the finish of the steam logging operation, which was closed down in the spring of 1926.

Eighty Per Cent Slopes

The logging operation at the Bradley camp was located near the Columbia river breaks. The land was rolling, but slopes up to sixty or eighty per cent were encountered and therefore it could not be considered an easy logging chance. In addition, to add to the cost of logs, it was necessary to haul them over four miles of railroad to an incline, 2800 feet in length, having a maximum grade of thirty-seven per cent. The logs were lowered down the incline, one car at a time, by a lowering engine and at the bottom of the incline

they were taken by another locomotive and hauled over twelve miles of track to the booming and rafting camp, on the Columbia river. From this point the logs were towed for a hundred miles up stream to the pulp plant at Oregon City.

In spite of the site, which was a costly one from the standpoint of log production, the management felt that the quantity and quality of the material left justified the establishment, on this area, of a re-logging experiment, on rather a large scale.

A decision was reached, however, to introduce other methods than those used on the former experiment. It was believed that better results could be secured by using gasoline-driven machines, which would be more easily moved and would cost less to operate.

Accordingly an old gasoline donkey, mounted on sled runners, which the company had on hand was pressed into service and a sixty-horsepower tractor, with a Willamette double drum attachment, was purchased. Both of these machines were used for yarding the small logs and chunks. Another old machine, in the form of a steam driven locomotive crane, was used for loading the logs on to cars, and to yard logs at short distances away from the track.

The men in charge of the work seemed to differ somewhat in their opinions as to the relative merits of the tractor and the gasoline donkey for yarding purposes, but all agreed that both machines were very efficient in reducing costs.

(Turn to page 48)



Virgin Timber Near Cathlamet, Wash.

Dr. Baker Comments on the West

American Paper and Pulp Association Secretary Sees Future For Northwest Pulp Industry



DR. HUGH P. BAKER
Executive Secretary, American Paper and Pulp Association

HERE has been more building activity in the pulp and paper industry in the Northwest in the last five years than in any other section of the country for a similar period of time.

This is the statement made by Dr. Hugh P. Baker, executive secretary of the American Paper and Pulp Association, who visited the Pacific Coast during July and August.

Dr. Baker pointed out that with the exception of a few instances all the producers in the West were marketing their pulp products outside of the West. It was indicated here that the West, by reason of advantageous resources is able to produce and compete equitably with the East. Dr. Baker also stated that the pulp and paper manufacturing industry is the most permanent of all industries using wood products. In this connection he pointed to the necessity of taking

measures to make the vast timber resources of the Northwest permanent in character.

To obtain this permanence he suggested the inauguration of forest fire preventive measures that will make stands of timber good fire insurance risks. The state of Maine was pointed to as an example where state and private cooperation has enabled timber owners to have insurance written on their stands.

Dr. Baker also deplored the method of timber taxation in the Northwest whereby the growing crop was taxed. This system, Dr. Baker said, forces the cutting of timber when markets are not ripe and hastens the eventual depletion of our timber resources which are so vital to western industries.

Dr. Baker stated that pulp of a quality on a par

HIGH LIGHTS BY DR. BAKER

The Pacific Northwest has shown more pulp and paper activity in the last five years than any other section for a like period of time.

The three Pacific Coast states contain about one-fourth of the remaining stands of pulp species in the United States.

Tendency toward integration of saw-mill and pulp mill is stronger in the Pacific Northwest than in any other section of the country.

Make the forest permanent by proper fire prevention measures and a system of taxation that does not force cutting.

Develop the industry on a sound basis by preceding construction with competent investigation.

with that now being produced in the East and other sections of the world can be produced from western woods, but pointed to the necessity of knowing these woods and the need for further engineering experimentation with them to obtain the highest qualities of pulp.

The trend of growth in the Northwest, he believes, will be toward the integration of the lumber and pulp industries. The great size of the timber in the Northwest makes excellent lumber, and therefore the lumber industry will always be a big competitor of the pulp industry for logs. Distinction should be made between timber and pulp wood in stating forest figures, Dr. Baker said.

Three Investigations Before Building

Although Dr. Baker predicted a promising future for the pulp and paper industry in the Northwest, he urged that development be made on a sound basis. Three things are necessary to sound development.

1. Because of the high capitalization and the permanence of the pulp and paper industry—it is estimated roughly that the cost to date of the modern pulp mill is from \$20,000 to \$25,000 per ton of daily capacity—investigation of the financial problem is important.

2. Local factors, that is, site, water, fuel, power, available raw material, and transportation, should be investigated by a qualified pulp and paper engineer.

3. Investigation of markets.

Following are excerpts from an address by Dr. Baker made in Seattle:

"Wood plays such an important part in the manufacture of paper today that it is difficult to appreciate fully what the manufacture of paper meant before wood became an important raw material for the industry. There are men still active in the paper industry who can remember when wood was considered to be more or less an experimental raw material. The paper industry is, in fact, unique among the industries of the country in witnessing, within a human generation, almost a complete change in the character of its raw material. The fact that the raw material for the pulp and paper industry has been changed within a human generation, is evidence of the youthfulness of the industry."

Statistics Mean Little

"In a way, statistics as to the consumption of wood in the pulp and paper industry, are not of vital importance. The million cord mark in consumption was passed about 1890. There has been a steady increase in the consumption of wood since that time. In 1926 we produced somewhat more than 4,500,000 cords and imported about 1,500,000 cords, making our total consumption approximately 6,000,000 cords."

"The probable expansion of both the lumber industry and the pulp and paper industry on the Coast make estimates of available supplies of raw material for either, of questionable value at the present time. Even the best informed men in the lumber industry differ greatly as to the life of the remaining virgin stands of timber."

"It is obvious, of course, that given a demand for pulp and paper which cannot be supplied from other regions, the industry can expand greatly in this region."

"The tendency toward the integration of the saw-mill and the pulp mill is stronger in the Northwest than in any other section of the country, and promises to be an important factor in future developments."

"At the present time, the only safe statement seems to be that there is a large supply of standing timber for both lumber and pulp wood, the eventual utilization of which must depend on the changing economic status of the two industries, more than on any other factor."

Pacific Coast Has Timber

"The Pacific Coast States of Washington, Oregon and California, contain, if all species are included, about one-half of the remaining saw timber of the United States. They contain approximately one-fourth of the remaining stands of pulp species in cords in the United States. In other words, the greatest reserve of standing timber in the United States is in the great Northwest."

"You, who are so vitally concerned with the permanency of the wood using industries of the Northwest, must take steps to save this wonderful country from the experience through which portions of the East have gone in the destruction of forest resources. Your chamber and every other chamber in the Northwest should carry through a campaign that would result in:

1. "Adequate forest protection—by which is meant making the forest an insurable risk."
2. "Such change in laws affecting the taxation of forest land as will offer an inducement to the private owner to produce timber. The young growing forest crop should not be taxed. You do not tax the farmers' growing crop. Secure a law that will put a low tax on the land or soil, and a yieldtax on the crop when cut, and a long step will be taken in the direction of forest renewal."
3. "Assist the Federal government through the forest service, so well organized here in the Northwest, and state and private owners, to keep forest lands continuously productive through public education and trade promotion."
4. "Use forestry as an aid to agriculture."

Western Pulp Activity Leading

"Pulp and paper mills have been operating in the three West Coast states on a satisfactory basis for a number of years. The growth of the industry in these states has kept pace, if it has not exceeded, the growth of the industry in other sections of this country. In fact, more new plants, enlargements, and improvements have been under way in the Northwest in the past five years than in any other section in the same period."

"Develop the pulp and paper industry in the Northwest soundly from within by helping existing mills to increase payrolls and profits, and there should be little need for anxiety as

to the future growth of the industry in the Northwest," Dr. Baker said, in urging development on a sound basis.

Dr. Baker made several important addresses in the Northwest, two of them being before the Portland Chamber of Commerce and the Seattle Chamber of Commerce.

At Portland Dr. Baker emphasized the importance of the pulp and paper manufacturing industry on the Pacific Coast, on data furnished him by B. T. McBain of Portland, designer of the Northwestern Pulp and Paper Company's proposed mill at Astoria, Oregon. Dr. Baker sketched the existing pulp and paper plants now operating in the western United States. This sketch included also pulp and paper projects which have not yet been constructed, but which are generally conceded to be definite enterprises that will soon be under way.

To Spend \$10,000,000 at Nimpkish

A crew of forty technical men and workmen under D. C. Henry, dam and hydraulic engineer of Portland, Oregon, is making extensive surveys of the Nimpkish River country, northern Vancouver Island, preliminary to the establishment there of one of the biggest pulp and paper and sawmill enterprises on the coast.

The surveys, which have been carried on all summer and will probably continue all next year, are for the purpose of ascertaining fully the extent of power resources available and the natural conditions that will have to be confronted in laying out mills and providing for a thoroughly up-to-date civic community which is expected to have a normal population of 6,000 persons when operations begin.

"The reason for the particularly extensive preliminary tests, consisting largely of drillings and run-offs, is that we propose to make use of practically the entire power capacity," a director of the company stated. "The original estimate was that we would obtain 25,000 horsepower by harnessing the Nimpkish River, but it is probable that this will be tremendously increased through the utilization of interlocking lakes along an extended water course."

The work is being carried on by the Canadian Forest Products, Ltd., which is a reorganization of the old Beaver Cove Pulp & Timber Company, one of the pioneer pulp concerns of Vancouver Island. The International Harvester Company controls the company and is prepared to spend millions on the project.

The company already has a 50-ton mill at Beaver Cove, but it has been idle for several years and many features of the equipment are regarded as antiquated. Improvements to this and erection of the new buildings will cost approximately \$10,000,000, it is estimated, but a much larger sum than that will be spent when the whole construction program is carried out. It is proposed to build a 250-ton unit at first and increase this capacity later to 500 tons.

Canadian Forest Products, Ltd., own about five billion feet of timber, most of which is classified as first class pulpwood.

Powell River Builds New Hall

One of the finest community halls to be built in a company town anywhere, is now being completed at Powell River by the Armstrong, Morrison Company, Vancouver, contractors. The hall will cost \$150,000 when completed. The company has also been making extensive improvements to its office buildings at Powell River.

Sacramento Pulp Mill Announced

Fifty-ton sulphite plant proposed to utilize white fir.



S. M. BUMP

PLANS for the immediate construction of a 50-ton sulphite pulp mill at Sacramento, Calif., by the newly-incorporated Sacramento Development Company, were announced recently in San Francisco by S. M. Bump, president of the company.

The mill is to be located directly south of Sacramento on a 527-acre tract of land belonging to the company. The site is exactly five miles from the California state capitol, located in Sacramento, and lies between the tracks of the Southern Pacific and Western Pacific railways.

Slabs and edgings from California sawmills, and cordwood are to be used by the new company in making the pulp. All the timber used will be white fir, which is excellent for the manufacture of pulp, according to data in the Sacramento company's office from the United States Forest Products Laboratory of Madison, Wis.

Will Make No Paper

The company will make no paper, but has already signed contracts with paper mills, it was announced, for the sale of its pulp.

The Jacobson Engineering Company, pulp and paper mill engineers of Minneapolis, Minn., are to be the construction engineers on the project. Peter Swan, saw mill engineer, and C. A. Kieren, pulp mill engineer, both of Portland, Oregon, are cooperating with the Jacobson and the Sacramento companies in the project.

President Bump announced on July 25 that construc-

tion would begin within sixty or ninety days and it was expected that the plant would get into production in nine or ten months from the time of the breaking of ground.

The Sacramento plant will be the second pulp plant in operation in California. The state's other pulp mill is the Floriston plant of the Crown-Willamette Company.

Approximately \$700,000 will be expended in the construction of the plant. The company is incorporated for \$2,500,000 and its first issue of stock was for \$1,500,000. The fiscal agent is to be C. M. Stapp, representative of the Brotherhood National Bank and the Empire Trust Company of New York.

The company is organized under the laws of the state of Nevada and filed incorporation papers in July with the secretary of state of California.

Officers of the company are:

Chairman of the Board of Directors: C. G. Tenger of San Francisco, vice-president of the Brotherhood National Bank.

S. M. BUMP IS PRESIDENT

President: S. M. Bump, of San Francisco, active for twenty-five years in the timber business in California. Mr. Bump built and operated the plant of the Fruit Growers Supply Company of Susanville, California, one of the largest saw mills on the Pacific Coast.

Vice-President: A. H. Land of Oroville, California, president of the Feather River Pine Mills, Inc.

Director: Harry Ballou, president of Ballou Dickey & Co., San Francisco investment house. Mr. Ballou has been active in the pulp industry in Wisconsin for twenty-five years.

Director: Ernest P. Lowe, for ten years president of the Falulah Paper Company of Fitchburgh, Mass.

Director: Kenneth A. Millican, San Francisco banker with the Anglo-California and Pacific National Banks.

Director: H. M. Wade, San Francisco, member of the law firm of Wade & Beck, with offices in San Francisco and Washington, D. C.

Astoria Mill Awaits Legal Test

The amendment to the City of Astoria, Oregon, charter, passed by vote of the people to enable the city commission to cancel city liens against the property on which the Astoria Box and Paper Company proposes to construct a sulphite pulp mill in connection with its present sawmill and box factory is being taken to the Oregon supreme court in a friendly suit in order to test its validity.

The friendly test suit was brought by Adolph Hauke to enjoin the city officials from putting the amendment into effect. In the Clatsop county circuit court, Judge J. A. Eakin held with the city on every point, sustaining the validity of the amendment.

Prevent Forest Fires—It Pays

By W. E. WEIGLE

Forest Supervisor, Snoqualmie National Forest

Nature gave the Northwest country climatic and soil conditions that produced on the North Pacific Coast the finest belt of timber known throughout the world. This belt of timber from Alaska to California still contains about thirteen hundred billion feet of standing timber.

If we wish to perpetuate this great industry, we must pay special attention to the cut-over lands. The climatic conditions along the North Pacific coast are exceptionally good for reproducing our forests and if the rather frequent seed years are given due regard in connection with our cutting program, there will be no trouble in getting a new forest started where the old has been cut without going to the expense of planting.

Fires Chiefly Man Caused

Forest fires are chiefly man caused. Those not caused by man are caused by lightning during electrical storms. Most of the fires are started by one of the following causes, campers, smokers, logging, land clearing, railroads or lightning.

Most of the fires are caused by carelessness. Much good work has been done in educating the public to be careful with fire in the woods and many of the people who now go to the woods are careful, but there are still many who have not yet learned to be careful with fire, therefore, the work of education must continue. Most of our fires are from thoughtlessness as few people are sufficiently low in the standard of civilization to start a forest fire purposely.

As the area of cut-over land increases, our fire hazard increases, therefore, the problem of fire prevention in the Northwest will require more men, more money and a greater effort in the near future than it does at present to get the same result.

The several fire protective organizations must have the cooperation of the whole public. Fire prevention must become the business of every citizen and not until then will the forest fires be cut down sufficiently in number to produce the desired results.

Perpetuate Pulp Timber Supply

Conditions throughout the Northwest are exceptionally inviting to the pulp and paper industry. Many new plants have been or are now being established. There is an abundance of timber available for them now and for a long time to come. There is no reason why these mills cannot have a permanent supply of timber. All that is necessary is to prevent forest fires. On account of the favorable climatic conditions, the growth of timber on the North Pacific Coast is very rapid and good pulp timber can be grown in from fifty to sixty years.

We already have millions of acres of young growth started and we must guard this heritage with the greatest care so that it will be ready for use when the timber that is now mature is gone.

There are many reasons why a greater effort should be made to bring about conditions which will practically exterminate forest fires. We should all be interested in keeping every acre producing rather than to remain a barren waste in the wake of fires.

The summer season is usually a fire season, therefore, everybody should be fire conscious and help in every way that they can to prevent forest fires.



One Careless Match



May Start the Fire



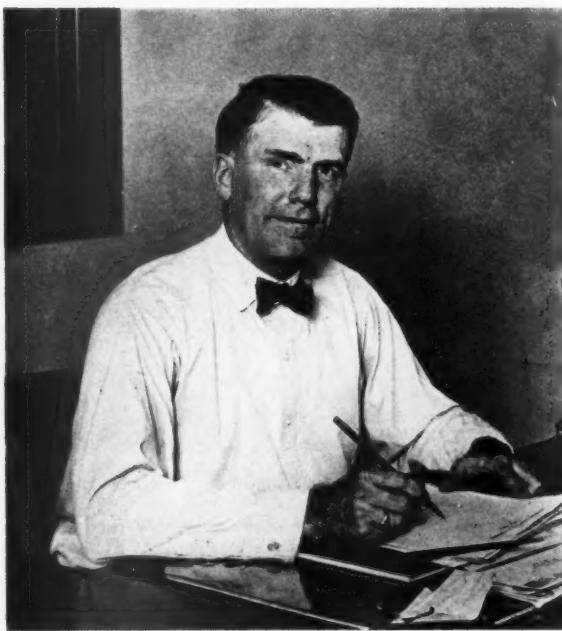
Devouring the Green Mountainside



To Make Graveyards of Forests

The Paper Bags Are Better

Meteoric growth of Bates Valve Bag Company in West, from one-room shop to \$300,000 plant in seven years, attributed to superiority of kraft containers over cloth.



W. S. WEAVER

MORE than a million and a half "multi-wall" paper bags are being made each month in the West, of western kraft paper and for western use at the new \$300,000 Los Angeles, California, plant of the Bates Valve Bag Company of Chicago.

Bags from the new Bates plant are used all over the West, from El Paso, Denver and Edmonton to the Coast and from Vancouver, B. C., to San Diego. Consumers include manufacturers and shippers of cement, plaster, diatomaceous earth, magnesite, poultry feed, fish meal, fertilizer, stucco, filter clay, fire clay, soda ash and coarser materials.

Eighty Per Cent Are Valve Bags

Of the total Bates output in the West, eighty per cent of it is the Bates five-wall valve bag fitted with a patented self-closing valve in one corner, through which the easy-running contents are poured. The balance of the output consists of the Bates open-mouth bags of three, four and five walls for coarser materials that cannot flow through the valve.

The growth of the Bates operations in the West has been described as meteoric. Seven years ago the Bates representation on the Coast started as a small service shop in the garage of W. S. Weaver, Los Angeles representative for the Bates company and the Valve Bag Company of America, a Bates subsidiary.

The service station at Weaver's home remained the Bates office in the West until 1925, when Weaver convinced the company that there was a vast market in the West for its "multi-wall" bags and induced it to establish a plant in Los Angeles.

In 1925, the Bates company bought property at 18th and Humboldt streets, Los Angeles, and established a one-unit plant to produce some 40,000 bags a day. Mr. Weaver was made district manager for the West and he has remained in that post since, blazing the trail for the firm's rapid advancement.

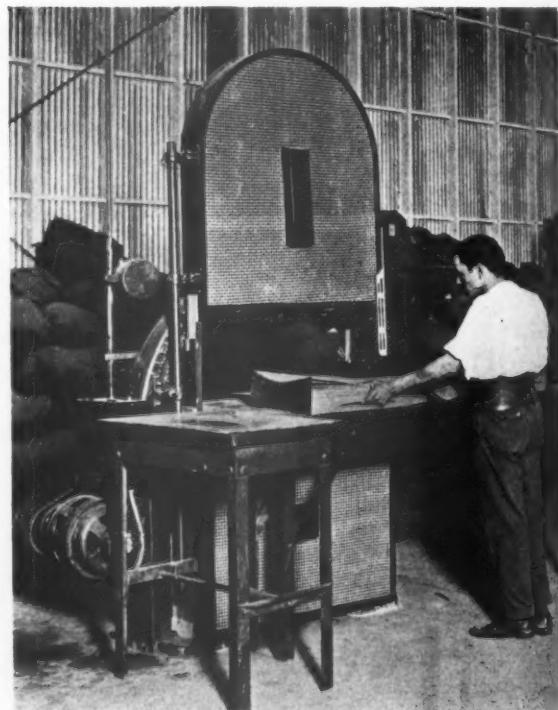
Business was good from the start. Learning that the old Mission Portland Cement Company of San Francisco was planning to market a new plaster cement, Mr. Weaver went to Herbert Coffman, former chief chemist and sales manager of the cement company, and suggested that the new product be sold in the new-type bags.

Mr. Coffman liked the idea and the first carload of bags from the Bates plant was shipped to the Mission company. This sale led to the adoption later, by the Mission firm, of the Bates bags for its regular cement shipments.

Western Bags Stood the Test

The cement company soon found that the western-made bags were better for its purpose than the bags it had been getting from the East. In the West the cement is poured into the bags hotter than in the East and the bags shipped from the eastern seaboard were unsuited to western climate and conditions, Mr. Weaver said recently. The Bates western-made bags stood the test.

To use Mr. Weaver's own phrase, "business came



Woodworking Band Saws Are Used for Sawing Stock



The two "tubers". The near machine is for plaster bags and the other is for cement bags. This is the principal piece of equipment in bag making, forming the five-ply bag in one operation. Kraft paper comes directly from the California-Oregon Paper Mills at the other side of the door in the rear

like wildfire" from the start. It wasn't six months before the Bates plant at 18th and Humboldt streets became too small. So last year the California-Oregon Paper Mills erected a building adjoining their plant in the Industrial District of Los Angeles and leased it to the Bates company. It is at 2001 East 57th street, Los Angeles.

Western Kraft More Suitable

At the start, the Bates company used eastern kraft paper for their bags, but soon found that they could get kraft paper from the California-Oregon mills that was better suited than the eastern paper to stand western climatic conditions. At the new plant, the California-Oregon warehouse adjoins the main room of the Bates plant and paper is trucked from the warehouse to the bag-making machinery.

In the old plant only one bag-making unit was operated. The new plant has two units and there is room for a third. When running to capacity, the new factory can produce 100,000 bags a day, or a little more than a carload. A carload is 80,000 bags. A full force at the Bates plant consists of 100 persons.

Officials of the Bates company are planning on installing a third unit to make smaller bags. At present all the bags are from 50 to 125 pounds in strength and the third unit will produce bags from 1 to 50 pounds. These smaller bags will have but one thickness of paper and will be made of crepe paper. They will be sold to wholesale grocers and the like for shipping goods to retailers, but will not be the "valise" type bag used over the counters by the retailers.

Two main sizes are manufactured now. One is 17

inches wide and 34 inches long and is known as the plaster bag. The other is 15½ inches wide and 28¼ inches long and is for cement. Each size has a three-inch gusset on the sides.

Gypsum manufacturers are big users of Bates bags. For years gypsum was shipped in single-wall bags and the largest bag possible held 80 pounds. Then western gypsum interests found that Bates "multi-wall" bags



The Bates Packers are made by the Bates Company and loaned to customers for filling the bags automatically



The tape sewing machine stitches the bags and sews a protecting tape on the top and bottom of the bag at the same time. Finished bags in the foreground are ready for the printing press

could be made to hold 100 pounds and they have been heavy consumers since. The fish meal and fertilizer people like the "multi-wall" bags also, because they confine the odor of the products to the bags.

Bags Replace Steel Drums

Mr. Weaver said recently that "multi-wall" open-mouth bags are replacing steel drums and barrels for lump lime and he suggested that western pulp and paper mills could show consistency by ordering their lime and chemicals in paper containers to promote one of their own products which can be reclaimed as pulp, abolishing foreign jute and burlap. "Multi-wall" bags are also coming into general use for hydrated lime, which has been shipped in single-wall 50-pound bags in the past.

The principal piece of machinery at the Bates plant is a "tuber," which takes the paper off five rolls and shapes it into long flat rolls, the width of the bags, with the gussets on each side. Each roll weighs 800 pounds and the "tuber" consumes between 30,000 and 40,000 yards of paper a day. The inside walls of the bags are of 40-pound stock and the outside walls of 50-pound stock. There are two tubers at the Los Angeles plant, one for cement and the other for plaster bags. The "Tubers" also glue each wall separately. The five seams are not placed one on top of the other, but are an inch apart, on each wall, to give the bag strength.

After going through the "tuber", the paper, in its five thicknesses, is sent to the cutter, which cuts the rolls the length of the bags. Next comes the band saws, which saw out the "valve"—a flap on the corner—which, when later sewed, is arranged so it closes automatically. There are three band saws at the plant.

Then the bags go to the "valver," a machine which opens the "valve" of the bag. After this operation, the bags are sent to the sewing machines, where a protecting tape is sewed across the tops and bottoms of the bags. Some of the sewing machines are double and some single. There are twelve "valvers" and eighteen sewing machines.

The final step in the manufacture of the bag is the

printing of the customers' labels on the side. This is done at the Bates plant.

Many of the machines used at the Bates plant were designed and built by the late A. M. Bates, founder and head of the company. Mr. Bates died last year, after building up a world-wide business, since 1904. The Bates company's plant at Chicago manufactures the "tubers," "valvers," printing presses and an automatic baler that ties the bags for shipment.

(Turn to Page 48)



Paper bags stack well as is evidenced in this pile, 35 bags high. The layers alternate 24 and 25 bags.

Union Bag Official Makes Statement

Claims that the Union Bag & Paper Corporation, of New York, had issued an "authoritative statement" to the effect that that company had definitely decided to build a pulp mill in the West, stated in one instance to be Tacoma, Washington, are branded as gossip by C. R. McMillen, vice-president and general manager, in a statement made to PACIFIC PULP and PAPER INDUSTRY.

The statements referred to, which appeared in Eastern financial and trade journals, might be very detrimental, Mr. McMillen has stated, in stirring up public discussion regarding the company's personal business affairs prior to any decisions that the company might arrive at.

Mr. McMillen spent several weeks on the Pacific Coast in May and June of the present year, during which time he visited many lumber mills, logging operations, pulp mills, and in general surveyed the Pacific Coast possibilities. He stated at that time that Union Bag & Paper Corporation had nothing definite in mind.

Regarding these "authorized statements" and the company's plans, Mr. McMillen writes as follows:

UNION BAG & PAPER CORPORATION
Woolworth Building
New York City

July 20th, 1927.

Pacific Pulp and Paper Industry,
71 Columbia Street, Seattle, Wash.

Gentlemen:

Businesses, like people, sometimes, aren't anxious to have their personal affairs published in the newspapers, when at times it may not be to their liking or interests to have their personal affairs made public.

As I think I told you when you called on me in Tacoma, Union Bag & Paper Corporation has been looking into the possibilities of the West Coast as compared with the South-eastern section of the United States in regard to pulp and paper opportunities.

This company has not committed itself to any definite plan or program as yet, and while we are studying the question, we are not anxious to publish what our business plans may be until we have definitely reached a conclusion. If, and when, such a decision is reached, I will be glad to give you an authorized full report of same promptly.

With kind regards, I am

Yours sincerely,
C. R. McMILLEN,
Vice-President and General Manager.

Port Townsend Mill Started

That the Zellerbach kraft mill at Port Townsend, Washington, will be pushed along during the construction period is evidenced by the rapid preparations that are being made. A pile driver was already on the scene on July 12, and, under the direction of Chief Engineer A. J. Bennett of the Zellerbach mills, the first test pile was lined up and driven.

Contractors who expect to figure on the job were present to witness the initial operations.

The \$2,500,000 plant will be built on a site owned by the Zellerbach interests, comprising 280 acres on the water front about one mile from Port Townsend. Some 6000 piles will be necessary, as the first unit of the mill is to be constructed between the inner and outer harbor lines.

A fill will be made on some portions of the site, the material to be taken from the bay to deepen the water at the docks.

Weather conditions at Port Townsend are favorable for building the year round, and for this reason Engineer Bennett believes a record can be made in completing construction of the plant.



Construction Has Started at the Northwestern Pulp and Paper Company, at Tacoma, Washington

Driving Piles at Tacoma

Actual construction is now under way at the Northwestern Pulp and Paper Company, Tacoma, Washington. A pile driver is on the job and has already driven the piling for a railroad spur into the plant and gone well ahead on driving the piles for the main unit of the building.

The well which is to supply water has been completed.

The mill is being built in 50-ton units, W. S. Dowd states. The first unit is designed for a 50-ton sulphite capacity, but the building is so constructed that an additional 50-ton unit can be added later if deemed feasible, with a minimum of change necessary in the plant.

Sigurd Norman, formerly with the J. H. Wallace & Company, pulp and paper engineers and chemists, New York, has been engaged as engineer for the Northwestern mill at Tacoma, and arrived on the scene recently to direct operations.

June Newsprint Production

According to the News Print Service Bureau monthly bulletin No. 114, production in Canada during June, 1927, amounted to 170,590 tons and shipments to 168,841 tons. Production in the United States was 125,284 tons and shipments 122,377 tons, making a total United States and Canadian news print production of 295,874 tons and shipments of 291,218 tons. During June, 16,627 tons of news print were made in Newfoundland and 1,266 tons in Mexico, so that the total North American production for the month amounted to 313,767 tons.

The Canadian mills produced 102,920 tons more in the first six months of 1927 than in 1926, which was an increase of 12 per cent. The United States output was 72,797 tons, or 9 per cent less than for the first six months of 1926; that in Newfoundland 34,119 tons, or 40 per cent more, and in Mexico 1,426 tons, or 23 per cent more, making a total North American increase of 65,668 tons, or 4 per cent.

During June the Canadian mills operated at 84.7 per cent of rated capacity and the United States mills at 82.9 per cent. Stocks of news print paper at Canadian mills totaled 28,851 tons at the end of June and at United States mills 26,549 tons, making a combined total of 55,400 tons, which was equivalent to 4.1 days' average production.

Comparing Futures With the Past

An Engineer Analyzes the Possibilities of Wood Utilization and
Pulp Production on the Pacific Coast

By L. A. DeGUERE

Pulp and Paper Mill Engineer

IT is natural and logical for any industrial development to follow where requisite conditions are favorable. It was natural that lumber and allied industries moved west. Paper pulp is essentially a good product and as such has followed and grown up with the lumber industry and it has continued long after large-scale lumber business has departed for more favorable locations.

The lumber industry is a big factor in the west and will continue to be for a long time. However, long after this section ceases to be considered the great lumber district in the United States, pulp and paper mills will flourish in vastly greater numbers than they now exist. This is a logical conclusion based on the record of actual conditions in Wisconsin and other states.

What is going on out here now is not greatly different from what was taking place in Wisconsin thirty years ago and has continued almost to the present time. Wisconsin has long since ceased to be considered a timber state, but pulp mills using wood for their raw material have been building for almost a half century and capacities are being increased even at the present time, and the raw material is still coming from the state. The same cry was heard there thirty-five to forty years ago about a shortage of pulp timber that I have heard voiced in the West within the last three years since I have been engaged in this district.

Comparing With Wisconsin

Today consumption of wood for pulp in Wisconsin is infinitely greater than it was twenty-five years ago and yet most of the wood used for sulphite pulp comes from within the boundaries of the state. Wisconsin never was a spruce state and mills using spruce for groundwood pulp or sulphite on a large scale were always obliged to go outside of the state either to Minnesota or Canada for this material. The production of ground wood pulp in the state has been gradually falling off owing to this, but raw material for sulphite and sulphate pulp is procured almost entirely from the state. Nevertheless I know of one mill in Wisconsin using spruce for grinding that secures almost its entire needs (about 10,000 cords per year) locally within hauling distance by wagon, sleigh or truck. This wood is being furnished by farmers or small loggers.

I appreciate that when a lumber operator thinks of pulp timber in units of saw timber he is apt to grow apprehensive of the future supply of pulp timber in this locality. When you know that a mill cutting 1,000,000 feet of logs per day could if this same timber was turned in pulp produce 1,000 tons of pulp per day, you

can readily understand that the few pulp mills that are contemplated here now are not going to deplete the timber supply in a very short period. Five saw mills cutting 500,000 feet of logs per day would supply all the pulp timber necessary to make all of the pulp that is now being imported into this country in the form of unbleached sulphite per year.

A Demonstrated Possibility

I do not expect that Western pulp will ever replace all of this imported pulp, but there is no reason whatever why a goodly portion of it should not be supplied from the West Coast, provided of course it can be manufactured cheaply enough to compete. That it can be has already been demonstrated as it is now being shipped into central states by rail at a profit to the manufacturer. By water shipments it can be put on the Atlantic Coast at a lesser cost.

What are the present sources of raw material for pulp mills in this territory at the present time? As I see it they are at least four—viz.: in logs of saw log size, smaller logs that are now left in the woods either standing or down, cord wood taken out by farmers and others, and waste from saw mills and other wood making plants.

Differential Favors West

Even at present day saw log prices pulp can be made much cheaper here than in the Middle West, as there is a differential in favor of the West of from \$10.00 to \$14.00 per M for logs.

It is no uncommon sight in Northern Wisconsin to see at every railroad siding and along highways, long piles of pulp wood stacked up that has been removed from lands that were formerly logged for lumber. That is what will happen in this country when there is a market for this material. It will begin to filter in from all directions so that any ordinary mill will have no difficulty in securing its wood supply without having to go far distant for it.

It has been said that if mills are built here based on using waste only, they will be disappointed as to the amount of waste available, its quality and continuity of supply. No doubt there is some truth in this, but if there are no more mills built than are justified by the waste that is available there need be no apprehension about supplying these mills with raw material in some form even if their waste supply should dwindle to much smaller proportions. This raw material can and will be received at a cost which is still much cheaper than it can be procured elsewhere in this country except perhaps in the South.

It stands to reason that as time goes by the cost of raw pulp material will grow higher rather than less in mid-West or Eastern states so that a large difference is always bound to exist. Inasmuch as pulp timber can be grown here in a relatively short time, with proper protection from fires, I see no reason why this territory cannot grow a perpetual supply of pulp timber, and all within a short distance of consuming pulp mills. It is no unusual thing for Wisconsin mills to have timber shipped to them from a distance of 600 miles by rail and most of it is transported from 100 to 200 miles.

What seems to be at present the most happy combination is the use of waste and otherwise inferior lumber from saw mills and certain wood working industries. It has been proven that a saw mill and pulp mill operation can go hand in hand to the great benefit of both industries and this should apply as well to any industry using lumber on a sufficiently large scale to warrant the installation of a pulp mill unit of economical operating proportions. With such a combination the raw material for the pulp mill can be supplied at little or no cost and as the necessary fuel is usually available the cost of pulp should be very cheap.

Economical Size Is Variable

Where a pulp mill can be balanced in capacity to the available waste and inferior timber and is at the same time large enough for economical operation the combination should be ideal. In saying large enough for economical operation it should be borne in mind that what might be large enough under one condition might be entirely too small under different conditions and where the mill can be supplied with wood at little or no cost, its size is not of so much importance as it might seem. The mills should be built substantially but economically, and as most of those being built or proposed are for the purpose of unbleached sulphite they need not be elaborate or complicated. The cost of such mills need not exceed \$10,000 per ton where they are built in conjunction with a saw mill as much of the wood-preparing operation is taken care of in the saw mill and the cost of the boiler plant will be reduced likewise. Mills in this climate can be built much cheaper than in the Middle West or upper Canada and the cost of operation of such a plant built to meet Western conditions will be less than in Wisconsin, owing to the fact that little will have to be spent for heating and various other phases.

What About Overproduction

What about overproduction? No one has ever said much about the sulphite mills that have gone out of production in the last few years. I recall four having a capacity of over 100 tons per day and I know of others, though I cannot recall their location at the present writing. To me there can be no overproduction in this country as long as there is the same quantity of pulp shipped in from foreign countries and it can be made as cheap or cheaper here.

At the low price of \$40.00 per ton it would keep \$30,000,000 per year more in circulation in this country and at least half of this could and should be attracted to the Pacific Coast. If only half of the pulp of this grade now being imported is manufactured on the West Coast in addition to that now being made here, it will call for a construction program of something like \$18,000,000.

This will give employment for a period of years to a large number of men during construction as well as

providing permanent employment for several thousand men in the operation of the plants. Indirectly it will give employment to thousands of others. It will bring in desirable trained operators and help in general in the building up of business on the Coast. Naturally the population of this district will increase, thereby producing an outlet for more commodities of all kinds, including paper and pulp.

It is evident that paper mills will be built later in connection with the pulp mills that are now contemplated. This has been the history of all pulp mill developments in the past. It is difficult to predict the far-reaching results that may be expected of a development of this nature; a development founded upon economic facts which are existent in this region, viz.: cheap raw material, cheap power, cheap fuel, good labor and climatic conditions and transportation by rail or water to all parts of this country and by water to all ports of the world.

Pulp Products Consumption Increasing

There is a normal average increase in the consumption of paper pulp products over a period of years in this country and no doubt in the world at large and the few mills that are likely to be built in this territory per year are not going to unbalance this to any degree. It is truly said "the consumption of paper is a measure of a people's culture" and when the day comes when "culture" is a by-word of the far Eastern peoples, the Pacific Coast States will not even begin to be able to supply their wants in paper products. This may be some time hence, but with new and quicker means of communication and transportation civilization and progress are going to go at a much faster pace in the next twenty-five years than they have in the last one hundred years.

Newberg Plant Ready in September

While most of the heavy machinery for the Spaulding Pulp & Paper Company plant at Newberg, Oregon, has been installed, there remains considerable work to be done before the mill is "tuned up" and ready to manufacture its first pulp. The first wheel of operation should be turned early in September.

The first unit is a 50-ton pulp mill and is modern in every respect. Acid towers, wood room, barkers, chippers and the sulphur burners are sufficiently large to supply an 100-ton plant, and if the pulp market remains at its present height, it is entirely possible that the capacity of the pulp plant will be doubled within the next year or so.

The Spaulding Logging Company has a sawmill with 150 yards of the pulp plant and is erecting a conveyor which will carry hog fuel and mill waste to the company's pulp and paper plant. This should be completed late in August. Under this arrangement the sawmill will have an outlet for much of its waste material now going to the burners. Thus the pulp plant will be enabled to obtain its fuel at a low figure.

Sulphite pulp will be manufactured from white fir and hemlock, and will be sold through contract with Perkins-Goodwin Company of New York to mills in the Central West.

The Spaulding Pulp & Paper Company is not controlled by one man or a group of men, but has approximately 400 stockholders, many of whom are in the Willamette Valley and are interested in the industrial development of Newberg and vicinity.

The Passing of the Ream

Pacific Coast Trade Adopts Thousand Sheet Count as Recommended at Del Monte Convention in May

PAPER tradesmen of the Pacific Coast this month adopted the muchly-discussed "Thousand Sheet Count" advocated as a new basis for simplifying paper tallying and weighing.

In San Francisco the date for the inauguration of the new method was set for August 8th and, according to Charles Kahn, secretary of the Pacific States Paper Trade Association, it was believed the plan would become effective in other coast cities at the same time.

Simultaneously with the adoption of the "Thousand Sheet" basis, Secretary Kahn announced, is coming the practice of packing many lines of paper in cartons.

New price lists and catalogues were prepared by San Francisco paper jobbers to take note of the adoption of the "Thousand Sheet" basis and heads of the larger companies expressed themselves as being strongly in favor of the move as a means of benefitting the paper trade and the printing craft.

"Ream" Becomes Obsolete

"We will have to change our conversation as well as our price lists," declared Charles Pritchard, sales manager of Bonestell & Co., San Francisco. "Under the new plan the word 'ream' becomes obsolete, so we have carefully deleted this word from our printed matter and we must train ourselves not to use it in our speech. In the future we will speak in terms of 'thousand' and 'half-thousand'."

Paper is made in pounds or tons and sold in reams. What is a ream? Funk and Wagnall's Dictionary defines a ream as "Twenty quires of paper, properly 480 sheets (a short ream), but often 500 sheets (a long ream), or in printers' reams, 516 sheets. Evidently, Funk and Wagnall do not know what a ream is or else we have been short-counting the printer for many years, as we never had a "ream" in our place that contained 516 sheets. The ream at one time consisted of 480 sheets, and then the quire was a real factor in the paper business because of the common use of large blank books made up from quires, but now the common acceptance of the term ream is 500 sheets unless otherwise specified for a particular purpose.

Quantity Translation Eliminated

Paper is sold in reams of 500 sheets and what are the printers' operations? All in Thousands. This situation necessitates the translation, by the printer, of all orders from thousands into reams to determine the amount of paper required for any job (except where an order calls for cardboards or other stock packed and sold by the 100 sheets). The result of this is, as every printer and paper merchant knows to his sorrow, many costly mistakes in translating thousands into reams, and much unnecessary figuring and wasted time.

O. C. Doane, sales manager of the Pacific Coast Paper Company, declared he thought the new plan would result in purchases of paper in larger quantities by printers with the attendant larger selling of paper by printers to their customers, the ultimate consumers.

At the office of the Zellerbach Paper Company, everything was ready by August 1 for the change. In one issue of "The Informant", the Zellerbach house

organ, a great deal of space was devoted to the move and copies of the issue were sent to the Zellerbach printer customers, so they would be familiar with the steps contemplated.

Arthur Towne of Blake Moffitt & Towne said that several paper mills represented by his company were among the leaders in adopting cartons for packaging paper.

The Pacific States Paper Trade Association approved the "Thousand Sheet Count" at its convention in Del Monte, California, in May, 1927, and moved to adopt the system before October 1 of this year.

The action at Del Monte was taken after a talk had been made on the subject by W. Noble Gillett, Chicago, vice-president of the National Paper Trade Association, Fine Paper Division.

In a few words Mr. Gillett explained the "Thousand Sheet Count" as follows:

"What is the thousand sheet plan? Simply this: Forget the ream, use 1,000 sheets as a unit of count and weight, figure jobs on the basis of 1,000, order so many thousand or fraction of a thousand sheets and of the weight per thousand sheets."

"The Informant," the Zellerbach organ, said the "Thousand Sheet" basis was the most sensible reform in standards since the adoption of the point system.

The following example of the plan was given by "The Informant":

New Count Is Explained

(1)—ONE THOUSAND SHEETS THE STANDARD BASIS—The ream as a basis of count and weight now becomes obsolete. Instead, hereafter, 1,000 sheets becomes the basis of count and weight.

(a) Count: All kinds of sheet printing papers will be counted in thousands of sheets or fractions of thousands. For example, instead of 4 reams, 230 sheets, it will be 2,230 sheets.

(b) Weight: Each substance weight will be the weight of 1,000 sheets. For example, the old standard sheet of book paper commonly known as "25x38-50," will now be known as 100-lb. paper, i. e., 1,000 sheets of 25x38 paper of this same substance will weigh 100 lbs.

(2) WRITTEN EXPRESSION OF WEIGHT—With the basis of count and weight thoroughly in mind, it remains to become familiar with the formula for expressing it.

Take for example, a given quantity of book paper, size and weight expressed as follows:

2,237 sheets, 25x38—80-lb. (M)—(old 40-lb.) means 2,237 sheets, 25x38, weighing 80 lbs. to the 1,000 sheets, "M" being the symbol for 1,000.

Again a given quantity of bond or writing paper, size and weight expressed as follows:

2,237 sheets, 17x22—40-lb. (M)—(Old No. 20) means 2,237 sheets, 17x22, weighing 40 lbs. to the 1,000 sheets, "M" being the symbol for 1,000. The use of (No.) in connection with the weight 20, indicates the substance number on the 500 sheet basis.

For designating the weight in ordering or billing, the expression (M) should be used until all are entirely acquainted with the new method. In Paper Merchants Catalogs, the heading "Weight are for 1,000 sheets" in prominent type will be used directly above items.

(3) ODD SIZES—The weights of odd sizes will be computed as heretofore but on the 1,000 count basis.

"The time has come," the Informant added, "when it is simple to buy paper the 1,000 sheet count and weight way and this method should be employed. From

every standpoint the plan is sound and lends itself to the printers and paper merchants' requirements.

"It will effect savings for printers and others concerned and it will eliminate errors in figuring paper stocks, as they now occasionally occur.

"It is purely a question of simplification and standardization and the method carries with it so many major advantages that are productive of savings as well as safeguarding against losses occasioned by errors that its adoption will be readily accepted as another step in building up a more profitable printing industry."

Book papers are not affected by the new rule. The order goes into effect on bonds, ledgers, all flat papers, linens, thin papers and cardboards. The rule will not affect the present conditions of pricing as related to the differential covering less than 500 sheets. The differential will continue as before at the 500-sheet quantity.

San Francisco Printers Endorse

The Printers Board of Trade of San Francisco recently passed a resolution approving the change and declaring that its members would cooperate to the end that the thousand-sheet basis for count and weight become universal in its use among printers.

The Division of Simplified Practice of the United States Department of Commerce suggested the use of a 1,000-sheet unit, instead of the 500-sheet ream as a basis of count and weight in 1923. The plan was tried with such success by the United States Printing Office that the United Typothetae of American recommended its adoption by the entire printing industry. Later the American Conference Board approved the plan.

Some of the arguments in favor of the change are:

"In calculating the stock for a job, most printers estimate paper as so many thousand sheets and then have to figure out the reams and fractions of reams before ordering.

"There is less likelihood of mistakes in figuring in thousand sheets for weight and quantity required.

"The plan provides an accurate and quick way of determining the value of the stock needed."

Paper trade leaders in San Francisco are in favor of the adoption by the mills of cartons for shipping standard paper. Cartons, they say, are easier to handle, may be used by the printers for reshipping, are a saving in freight, make for elimination of spoilage and are ideal for the smaller orders.

It has been demonstrated by tests that paper will carry satisfactorily in solid fibre and corrugated cartons up to a maximum gross weight of 175 pounds per carton, provided the cartons are made according to the proper specifications.

L. A. Discusses Box Advertising

Plans for advertising the advantages of the paper box to the general public were discussed by members of the Los Angeles Paper Box Manufacturers' Association at a luncheon they gave last month to Howard P. Beckett, Philadelphia, commissioner of the National Paper Box Manufacturers' Association.

Mr. Beckett started the discussion by suggesting the possibility of retail merchants making window displays of goods packed in paper boxes and bringing out the advantages of using these containers.

Such window displays, Mr. Beckett said, would show the different uses of paper boxes in retail merchandising and would create in the public mind a desire for goods packed in paper containers.

A "Paper Box Week" was suggested by Mr. Beckett and some sort of prize competition for the best window displays during this week could be arranged, he said. It was the sense of the meeting, however, that no "Paper Box Week" would be attempted unless it had something very effective and unusual on its program, because of the great number of "weeks" of other kinds which are national fixtures.

The Los Angeles members thought Mr. Beckett's suggestions very good and it was thought that something might be done in the south to carry out some of the ideas.

Charles Ruble of the Standard Paper Box Company declared at the luncheon that he had once made similar suggestions to his staff, but he had been voted down. Harry Lourie, also of the Standard Company, thought the proposal should be seriously investigated by the Los Angeles body.

Paper Box Has Appeal

In the course of his remarks, Mr. Beckett declared the advertising appeal of a paper box was getting stronger, as manufacturers and merchants were learning that the sides and top of a paper box contain valuable space to carry advertising for their products. Mr. Beckett said an advertising man, in one eastern city, proved a better paper box salesman than a regular salesman, because he could point out to the buyer the advantages of using the paper box for advertising purposes.

At the recent convention at Del Monte, Calif., of the Pacific Coast Paper Box Manufacturers' Association, Charles A. Elvin, secretary of the Los Angeles association, talked along similar lines, pointing out that the cost of extra printing and color work on paper boxes could be charged by the buyer to his advertising account. This would distribute the cost of printed paper boxes over more than one account.

Beckett Likes the West

At the Los Angeles luncheon, Mr. Beckett said that this visit was the first he ever made to Los Angeles and he declared he was greatly impressed by the metropolis of Southern California. Wherever he goes, Mr. Beckett said, he visits the larger stores to discover, if possible, new uses for paper boxes, and he said he found Los Angeles stores of the same class as the big stores of the East.

Present at the luncheon to Mr. Beckett were: W. Graham of the Paraffine Companies, Inc.; Charles Kerr and Sanford Rice of the Hollywood Paper Box Company; Charles Ruble and Harry Lourie of the Standard Paper Box Company; C. S. Rutherford of the National Paper Products Company; Charles A. Elvin, secretary of the Los Angeles association; Miss R. Mass of the Mass Paper Box Company, and E. Sinclair, president of the Eureka Paper Box Company.

Mr. Beckett left for the East soon after the Los Angeles visit. He came to the Pacific Coast to attend the Del Monte convention.

West Has Pulp Resources, Says Ayerst

Aside from great timber resources which give the Pacific Northwest great advantages for pulp and paper production, the West has in abundance lime rock, sodium sulphate, and sulphur—the latter in Alaska—all important ingredients in the manufacture of pulp and paper. The statement was made by A. B. Ayerst, who is associated with Percy E. Wright, Seattle engineer, before a luncheon of the Seattle Mining Club recently.

"Pacific" Puts in An Oar

Editor
Pacific Pulp and Paper Industry,
71 Columbia Street,
Seattle, Wn.

July 26, 1927.

Dear Sir:

Permit me typographically to shake hands with "Westerner" who, in your July number, without swinging a hammer, manages to hit quite a few nails right on the head. I don't know who "Westerner" is, but I'm all for him, and with your permission I'll put in my oar. It is a pleasure to paddle in the same canoe.

I agree with "Westerner" when he scouts this idea that the Eastern mills, representing millions invested, will withdraw all support from the West in building up a pulp and paper industry if "unwarranted competition" develops out here where Nature saw fit to grow vast quantities of pulp wood.

A Paradoxical Situation

The situation has much about it that is paradoxical. On the one hand we are told that it is very foolish for us to go ahead and build up a pulp and paper industry out here. And, mind you, the manner in which we are told. Scouts and plenipotentiaries pay good railroad fare and spend their valuable time coming out here from the East in a spirit of big brotherhood and tell us that we mustn't go into this pulp and paper business. We'll lose our money.

Now it is pretty hard to convince me that the East is so almighty interested in us in this fatherly fashion, trying to keep us out of harm's way for our sake, by crying down a development in the West. There is more to it than that. Why all this gum shoe work, this secret session business with bankers, lumbermen, and other Western business men who are talking pulp and in many cases acting on it?

If the market is in such dire straits, as these Eastern "powerful interests" would have us believe, why is it that pulp output is contracted for before mills are even built? Why are pulp brokers touring the West, scouting the field for themselves, looking for these new mills while they are still little more than proposals.

Agrees With Westerner

I agree with "Westerner" when he says that the West is entitled to its own development. It is solely a question of economics. If the West has wood, water and power that can be so advantageously used as to permit the laying down of pulp and paper of good quality in the world's markets at less cost than other producing centers, then you can rest assured that some genius is going to see the opportunity and go to it.

So far this genius has been Western genius almost without exception. If Eastern capital makes the threat that it will withdraw from the game if we don't play the way it dictates, I think the East should simply be reminded that it isn't holding a very large stack of chips in this session anyway.

There is little danger of the industry running wild, and for several good and self-sufficient reasons. In the first place, the pulp and paper industry requires a large amount of capital to go into it. It isn't like starting a grocery store. Development will supply its own brakes. Before any enterprise can be started some definite things are going to happen. Our Western men are not the children that some "Eastern interests" would make them out to be. If a group has its own

money to go into the pulp and paper game it is going to satisfy itself pretty thoroughly before investing hundreds of thousands, or millions, of dollars that the proposition is meritorious.

If the enterprise is dependent upon outside money the promoters are going to find it necessary to satisfy the investors before they can get the money.

One thing that bothers me is this. Why, if development of a pulp and paper industry is such a bad thing for the Pacific Coast, why are such established and successful firms as the Zellerbachs, the Hawleys, and the Leadbetters going right ahead with new mills and expansion programs? I haven't had a satisfactory answer to that?

Western progress is backed by genius that is too solid to be scared out by any "boogey man" shaken at it by "powerful Eastern interests." Believe me, "Westerner," we're right with you.

Yours truly,

"PACIFIC."

Editor's Note—Pacific Pulp and Paper Industry has opened its columns to the above writer because it believes that the statements made will be of interest to a great many of its readers.

Montell Makes a Rebuttal

Editor Pacific Pulp and Paper Industry,
Seattle, Washington.

Dear Sir:

In your July number, "Westerner" takes issue with some of the statements made by the writer in a previous article proving the necessity of producing pulp instead of paper in the Northwest. As the subject is one of considerable importance to the Northwest and as "Westerner" incorrectly quotes and interprets the writer's conclusions, space is respectfully requested for the following:

"Unwarranted Competition," "Survival of the Fittest," the parallel of the new cotton mills in the South, etc.

"Westerner" does not differentiate between overproduction, which is rigidly avoided by all American producers except farmers and Western lumbermen, and legitimate competition, which is the life of industry. He forgets that a terrific competition can take place inside of legitimate production, and that overproduction injures not only the surplus producer, but all other producers and the public holding the securities as investments. He also forgets that the much maligned Eastern financial interests are merely managing funds to be invested for the public and that they are to a degree responsible for the securities they underwrite. It is this overproduction which is "Unwarranted Competition," and when the writer called attention to this danger in local manufacture of paper and the absence of overproduction in the manufacture of pulp, he stated a fact known by all present authorities on the subject.

It is necessary to recognize facts as they are, not as we prefer to see them, and beyond a mere preference, "Westerner" has not made out a case for local financing. The facts are that the Northwest is compelled to rely on Eastern financing for any large industrial development, and that no money can be obtained unless the proposed development is sound. And if it causes unwarranted overproduction and thereby jeopardizes its own existence and reduces the value of the investments in Eastern paper mills held by the American public, then it is unsound and cannot be financed.

"Westerner's" attitude is difficult to comprehend. The writer proved that there existed surprising opportunities for producing high grade sulphite pulp in the Northwest without any conflict with either existing mills or the centers of financing, but "Westerner" develops a considerable temperature over the reference to sources of financing, and appears to advocate the production of paper in the Northwest, rejected by all impartial authorities, except for the insignificant local demand.

It is, however, necessary to give "Westerner" credit for one correct statement: "The West has men and brains of its own, and it has raw material and power."

These men will for some time to come go East to finance all sound development of their raw material and power, and a sound development of the pulp and paper resources of the Northwest can be safely left with them, and as they admittedly have brains, they will refrain from increasing the present overproduction of paper.

Yours for SOUND Western development,

R. R. MONTELL.

August 1, 1927.

Editor's Note—In reading Mr. Montell's letter it is well to bear in mind the distinction he makes between pulp manufacture and paper manufacture.

Kellogg Urges Sound Development

The Pacific Coast has great possibilities as a pulp and paper manufacturing center, but enthusiasm in the subject is a bit too abundant at the present time, according to R. S. Kellogg, secretary of the Newsprint Service Bureau, with offices in New York, upon the occasion of a visit to the Pacific Coast.

"I find everybody out here quite warmed up over pulp and paper. There are many things to be considered before embarking in the business. The most thorough investigation into matters of production and marketing are necessary, and your enterprises should proceed with caution.

"Already you have a great development here, larger perhaps than is generally realized. There are many more propositions being made, and undoubtedly much more sound development is due for the Coast. Each project should be thoroughly investigated on its own merits."

Mr. Kellogg has been on the Pacific Coast on previous occasions, so that he is not unfamiliar with the West, although his last visit to this section dates back several years. He expressed surprise in the amount of development that has been made since his last visit.

Astoria Mill Lets Contracts

Plans developed by B. T. McBain, pulp and paper consultant of Portland, for the Northwestern Pulp and Paper Company, of which he is general manager, have been placed in the hands of contractors with the request that they submit bids during August on general construction of the mill.

The plans call for a pulp mill with a 24-hour capacity of 125 tons of sulphite pulp, and they provide as well for the erection of a modern sawmill in connection with the pulp plant.

The board of directors of the Astoria Chamber of Commerce has agreed to undertake a campaign to aid in the disposal of \$170,000 worth of stock to complete the financing of the Northwestern Pulp and Paper Company. The stock will be sold under an escrow agreement which provides that the subscription shall be

turned over to the company under the following conditions:

1.—If a contract for the construction of the company's mill at Astoria is signed before October 15, 1927;

2.—If the contractor gives a bond to insure completion of his contract by October 15, 1928;

3.—If the bond is approved as to amount and form by Frank Patton, president of the Astoria Savings Bank; W. A. Tyler, president of the Astoria National Bank, and S. W. Lovell, president of the Bank of Commerce of Astoria.

Vance P. Edwards, formerly with the Forest Products Laboratory, Madison, Wisconsin, has taken a position as mill manager and general superintendent of the Northwestern Pulp and Paper Company, Astoria, Oregon. Mr. Edwards who, with his family is visiting relatives in San Francisco, assumed his new duties early in August.

Before going to Wisconsin Mr. Edwards, who is a graduate of a California university, was for four years under B. T. McBain, then manager of the old Willamette Pulp and Paper Company at West Linn, Oregon. Since going East he has been connected with various pulp and paper industries, as well as in government work. He has shipped his household effects to Astoria, where he will hereafter make his home.

Astoria Buys Water Site

Sale of the dam and powerhouse site at Youngs River falls, eight miles south of Astoria, Oregon, to the City of Astoria was recently completed by the Crown-Willamette Paper Company, the consideration being \$14,419.75.

The property involved is something over 200 acres, lying principally above the crest of the falls, where the city proposes to erect a headworks dam for a new water system planned to supply pulp and paper plants.

The excellent powerhouse site at the foot of the falls is also included, while the company gave free right of way for a pipeline through its surrounding property. In addition to the monetary consideration, the city agreed to furnish water for the company's operations below the falls and the company to allow the city free use of its logging railway during the construction of the dam.

Of the purchase price \$7,720.75 was paid for the land and \$6,699 for the timber standing on it.

No action has been taken toward letting the contract for the Youngs River water system, this being held up on request of B. T. McBain, general manager of the Northwestern Pulp and Paper Company, while he investigates the feasibility of securing water for the company's plant from wells.

The plans for the water system were prepared by R. A. McClanahan, city engineer of Astoria, assisted by G. T. McClean, special engineer, and with Stevens and Koon of Portland as consulting hydraulic engineers.

D. A. Fleischman Returns East

D. A. Fleischman, who has been in Los Angeles, Calif., in connection with the opening of the new plant of the Bates Valve Bag Company, left last month for Oswego, N. Y., where he is to take charge of a new plant of the Taggart Brothers Company, manufacturers of rope paper. The main plant of the Taggart company is at Watertown, N. Y.

Mr. Fleischman formerly was assistant general manager at the home office of the Bates company in Chicago.

T-R-A-D-E - T-A-L-K

Devoted to the Paper Trade of the Western States

L. A. Stages Seven-Course Golf

Close competition is featuring a golf tournament being held this summer among members of the Los Angeles Paper Trade Association. Games are played every other week and it is expected the finals will be reached in September, when prizes will be awarded the players finishing first, second and third.

T. M. Denison of Blake, Moffitt & Towne's Los Angeles office and J. R. Coffman, secretary of the Los Angeles association, arranged the tournament and set the handicaps. There are two foursomes in the tournament and play started about two months ago.

The tournament is being played over the courses of seven different clubs around Los Angeles, each player being the host at his club for one of the games. The final and possibly deciding match will be played at the California Club, where Secretary Coffman will entertain.

The names of the players, their firms and the clubs at which they are entertaining are: J. Y. Baruh, Zellerbach Paper Co., Hillcrest Country Club; F. M. Couch, Blake, Moffitt & Towne, California Club; E. W. Buckley, Western Pacific Paper Co., Brentwood Club; William Taverner of Taverner & Fricke, Flintridge Club; George I. Tompkins, Sierra Paper Co., Bellaire Golf and Country Club; T. M. Denison, Blake, Moffitt & Towne, Rancho Club, and Carl Hatch, representative of the Cascade Paper Co., Wilshire Golf Club. These seven and Mr. Coffman make up the two foursomes.

Each player is to be assessed a certain sum for prizes and when the final scores are in, the winners can choose the prizes they wish, but they cannot buy them themselves. The committee on prizes will purchase the prizes selected.

Frequently one of the paper tradesmen cannot get off from business for a game, so one of the manufacturers' representatives is called in. Gerald Young and H. Brightman of the Crown-Willamette Paper Company are among the manufacturers who have subbed for the tradesmen.

All the players in the regular foursomes are tradesmen except Carl Hatch, one of the crack golfers among the paper men of the West. Mr. Hatch won the tournament at the annual convention held by the Pacific States Paper Trade Association at Del Monte in May.

In the middle of July, Mr. Hatch and Mr. Baruh were leading the tournament, with "Bill" Taverner and Secretary Coffman shooting good golf.

Each man keeps an individual score, depending upon the number of holes he defeats his opponent. If one beats another two holes, the winner adds two to his total points and the loser gets nothing for that play.

Butler Uses Unique Display Methods

The Butler Paper Company in its Denver Branch has a very unique display of its large stock of papers. Counters with plate glass tops display all styles of paper handled by the company in printed form, the printing being done by printer customers in the Denver region.

Visiting customers have an excellent opportunity of seeing fine printing on fine paper, an admirable combination.

Particularly attractive pieces are framed and hung up for permanent display while others are changed about every two weeks. Chief among the papers displayed is Butler's Campania, the new perfect reproduction of Italian hand made paper. The exhibits include all forms of printed work from small circulars up to fine leather bound books.

Water Freight Losses High

"Some of the paper we receive from Atlantic ports by water freight, despite the substantial packing, looks as though the stevedores had done a dance on it," remarks John W. Thompson of the Mutual Paper Corporation, Seattle.

"It makes our costs higher, and it's a problem what to do," Mr. Thompson continues. "It seems that no matter how substantial the packing, we lose anyway. In some cases it seems just as well to figure in a twenty-five per cent loss by damage in handling in the water shipment and save packing expense, instead of figuring thirty per cent or more for extra careful packing in an attempt to get the goods to the Pacific Coast undamaged.

"We have had to ask some of the mills to discontinue carton packing, because of the character of our trade here, and the large amount of damage resulting.

"One would think that with the modern dock equipment and improved slings and carriers now being used in loading and discharging ship's cargo that damage would not run to these proportions. But it seems to do little good, the damage in transit is heavy despite all these things."

Benedict Trains Them

Business has been so good at the San Diego, California, office of Blake, Moffitt & Towne, paper jobbers, that R. E. Benedict, the manager, has passed up three vacations in a row. Mr. Benedict will not go away this year, but swears he will take a real vacation next year. He is kept busy training salesmen who are young in years and new to the firm, as San Diego appears to be a seasoning ground for junior employes of this firm.

Weir Markets "San Diego Bond"

The spirit of loyalty to the home-town was touched by Julian F. Weir, head of the California Paper House, San Diego, Calif., recently when he put on the local market his "San Diego Bond" paper for stationery. San Diegans responded generously to this offering and Mr. Weir reports business on this item very good. Mr. Weir's bond mark has been copyrighted.

Jaggard Views New Cascade Machine

B. P. Jaggard, San Francisco sales manager of the Cascade Paper Company, has been spending the past several weeks at the mill, forming a first hand acquaintance with the new 156-inch paper machine, which will be in production sometime in August.

The Cascade mill is not planning to manufacture additional lines of paper, but will continue the book and other high grade papers that it has supplied in the past. With the new machine in production, however, the Cascade sales force will be in better position to supply its demand. Mr. Jaggard travels in California and goes East into the mountain states as far as Salt Lake.

"Business I have found quite fair," Mr. Jaggard states.

Now, Now, Mr. Buckley

All tired out, E. W. Buckley, president of the Western Pacific Paper Company, 1231 South San Pedro Street, Los Angeles, returned to town recently from Catalina Island with a story of how he almost caught the biggest tuna in the waters around the famous Wrigley island.

Mr. Buckley said he struggled with the tuna for an hour and a half, during which time the fish made a swerving, side-stepping dash towards China, taking 800 feet of line. Then it got away. Mr. Buckley even reported that they had to strap him into the boat to keep the fish from pulling him into the big drink.

Paper tradesmen around Los Angeles are guessing the weight of the tuna. Mr. Buckley says he believes it weighed at least 175 pounds—maybe more. And no one can say he is wrong.

Mail for Davey Jones?

A northbound shipment of 100 cartons of envelopes from the Pacific Coast Envelope Company, 416 Second Street, San Francisco, went to the bottom when the steamer Northland, on which they were being shipped, collided with the British freighter Pacific Trader off the Golden Gate July 21. George R. Davis, manager of the envelope company, did no worrying over the loss, however, for he has all his shipments, no matter how small or large, insured against loss.

Ayres Addresses Denver City Club

Rollin C. Ayres, advertising manager of the Zellerbach Company, San Francisco, addressed the City Club at the New Manhattan restaurant in Denver, July 25, on the subject "When Does It Pay To Advertise?" Mr. Ayers also told the why and the where of advertising as well.

Guthrie Heads Seattle Paper Merchants

W. G. Guthrie, manager of the Seattle branch of the Zellerbach Paper Company, is now president of the Seattle and Tacoma Paper Trades Association. Roy Davison of the Standard Paper Company, Tacoma, is the new vice-president and J. Y. C. Kellogg has been retained as secretary-treasurer.

Western Paper Company Moves

The Western Paper Company of Denver has moved from 1641 Stout Street to new and more spacious quarters in the Chamber of Commerce Building. A suite of rooms on the fourth floor of the Chamber of Commerce Building now enables the firm to better take care of a growing printing paper business.

Manwarring Now in San Francisco

Tom E. Manwarring of the firm of Riddell-Reid, Inc., Los Angeles, has been transferred to San Francisco to assume the management of the office there, replacing Thomas E. Delahunt, who died recently. Riddell-Reid, Inc., are western representatives of the Advance Bag & Paper Co., Boston, Mass. Their San Francisco office is at 311 Market St.

Introducing New Announcement Paper

A new announcement paper, suitable for direct mail and announcements is being introduced by the B. D. Rising Paper Company of Housatonic, Massachusetts, Mr. H. H. Reynolds, manager of sales, was on the Pacific Coast recently, bringing samples of this grade with him. The new paper is called "Olde Quill," and comes in white and five or six shades.

Old Colony Representative West

F. A. Juckett, of the Old Colony Envelope Company, of Westfield, Massachusetts, made his annual trip to the Pacific Coast during July. He is an old friend of C. H. Beckwith, Northwest manager of Carter Rice & Company, Seattle. Mr. Beckwith was the one who suggested the name "Old Colony" for the Massachusetts company.

Murray Wields a Hammer

Not in any sense knocking, but nevertheless wielding a hammer, J. L. Murray, manager of the Mutual Paper Corporation, Seattle, was discovered late in July at Long Beach, Washington, helping to build a summer beach home. It's a good time for vacations, anyway, with the hot weather making people feel like swimming, and business a bit dormant.

B. M. & T. Prize Awarded

The desk set, hand wrought in copper, offered by Blake, Moffitt & Towne, for the best exhibition of printing at the recent Portland convention of the Pacific Coast Advertising Clubs Association, was won by the H. S. Crocker Company of San Francisco. Competition was keen and many of the leading Pacific Coast printers entered displays.

Milne Takes Time Off

The hot streak late in July made G. W. Milne of the Northwest Envelope Company, 2710 First Avenue South, Seattle, think of the cooling breezes over on Vashon Island in Puget Sound. Result, Mr. Milne decides it's a fine time to begin a vacation. He is taking two weeks beginning July 25.

Paterson Parchment Has New Office

The Paterson Parchment Paper Company of Passiac, N. J., has changed its San Francisco office from Room 201 to Room 1224 Balfour Building, it is announced by W. J. Gray, local manager.

Raymond Going After Pulp Mills

Raymond, Washington, center of the heavily-timbered Willapa Harbor district, is to make a concerted effort to give publicity to the advantages it has for pulp and paper mills. Floyd L. Lewis, head of the recently reorganized Chamber of Commerce, has announced that prospective pulp mill builders will be circularized with information regarding the Willapa Harbor district.

**Set-up
Folding
Corrugated
Solid Fibre**

BOARDS and BOXES

A department for interests allied
with the pulp and paper industry

**Board
Mills and
Paper
Converters**

Ought to Call It the "Centipede" Cup

Members of the Los Angeles Paper Box Manufacturers' Association are staging a golf tournament, which started several months ago and which promises to be perpetual. There is a leg for everybody on this cup.

Every two weeks the tournament trophy changes hands. The trophy is a cup, donated by the Hersee Company, paper box manufacturers of 910 East Sixtieth St. Games are played on different Los Angeles courses every fortnight and the winner of each meeting holds the cup until the next play.

T. B. Seebaldt, vice-president and superintendent of the Hersee Company, said recently that the cup was a perpetual challenge trophy and that no player could keep it permanently, no matter how many times he won it. Mr. Seebaldt and C. W. Hering, president and general manager of the Hersee Company, are handling the tournament.

R. C. McCrystal, general superintendent of the Southgate plant of the National Paper Products Company, held the cup during the first half of July. Others who have held it include W. F. McClellan of the Angelus Paper Box Company, Harry Harris of the Advance Paper Box Company, and Murray Brown of the Paraffine Companies, Inc.

Other players in the tournament, beside Seebaldt, Hering and the "champions" are Dick Graham, Bruce Brown and Harvey Brown of the Paraffine Companies, C. S. Rutherford of the National Paper Products Company, M. C. Larsen of the Los Angeles Paper Box Factory, Charles Ruble of the Standard Paper Box Company, and Herbert Dunlap of the Hollywood Paper Box Company.

The golf tournament, it has been found, produces a splendid spirit of good fellowship among the paper box manufacturers of the southland and, too, is a means of training some southerner to take the Coast championship away from President Schmidt when the Pacific Coast Paper Box Manufacturers' Association meets in convention at Del Monte next year.

Apple Growers Interested in Cartons

Paper box cartons in small units for Pacific Northwest apples are being advocated by the advisory board of the Pacific Northwest Shippers which met in Spokane June 8. The movement comes as a result of an exhibit at the meeting of cartons which were shown to be practical and without question beneficial to the increased sale and wider distribution of apples.

The exhibit, arranged by a Seattle advertising agency, aroused interest and prompted questions and discussions on the merits of cartons for packing apples. The visitors were reported to be unanimous in declaring that a carton pack would result in a larger sale of extra fancy apples, particularly on trains.

Seven of the packers and shippers stated that they wanted to try out a percentage of this year's pack and asked for definite data as to the securing of cartons and the cost. While there were many different opinions

as to the effect of keeping the apples in the cartons, no one expressed the belief that any detrimental effect would result. The additional cost of the cartons would be negligible in comparison to the increased profits, it was pointed out.

Several of the larger carton manufacturers on the Pacific Coast are understood to have expressed their willingness to co-operate in the development of this idea and are now said to be working on various types of cartons, made adaptable to the standard apple box.

Patents New Type Paper Tube

C. F. Goodyear, salesman for the F. C. Stettler Manufacturing Company, Portland, has been granted a joint patent with Mr. Stettler on a simplified device for packing fragile articles which now employ the use of paper tubes.

"The new device is so made that not only is there a great saving in material used in manufacture, but also a corresponding saving in labor to the customer," says Mr. Goodyear. "Instead of using individual paper tubes, as has been customary heretofore, the patent (called the "Three in One" tube) permits three tubes to be formed in unity, thus employing less stock and less labor in manufacture and subsequent use."

The Stettler concern will retain sole Portland rights on the invention, but will probably market the device in other cities, it was understood.

Mr. Goodyear, who has been connected with the F. C. Stettler Company for the past three years, has during his connection with various paper houses in the Middle West and on the coast been granted twenty patents on as many different paper products and novelties.

Frisco Box Makers Plan Golf

Plans are being made by paper box manufacturers of San Francisco for another golf tourney to be held soon at the Beresford Golf and Country Club as a means of forgetting business for a day and getting better acquainted.

Tournaments are held frequently by the box makers of San Francisco. The last match was won by Carl R. Schmidt of the Schmidt Lithograph Company, president of the Pacific Coast Paper Box Manufacturers' Association, and 1927-28 golf champion of that body.

Walter D. Heller of the Paraffine Companies, Inc., San Francisco, is handling the arrangements for the coming tournament. It is said that one of the feature matches will be between Louis Raisin of Raisin & Zaruba, San Francisco, and Dave Sahlein of the Boxboard Products Company, San Francisco.

Something to Blow About, "Jill"

Jule J. ("Jill") Thiebaut, one of the firm of Thiebaut Bros., San Francisco paper box manufacturers, made such a hit with his midnight harmonica playing at the recent convention at Del Monte, California, of the Pacific Coast Paper Box Manufacturers' Association,

that he was presented with another musical instrument by his admiring fellow box makers.

The "gift" came in a great big box and was accompanied by a letter supposedly from the Hotel Del Monte management, suggesting that Mr. Thiebaut study the new instrument, as he had gained proficiency on the harmonica. The "gift" was an ancient automobile exhaust and muffler, and Mr. Thiebaut swears it came from his friends of the Paraffine Companies.

Tourist Trade Means More Boxes

Business is getting back to normalcy fast, according to Charles Ruble of the Standard Paper Box Company, Los Angeles. Mr. Ruble has decided that July is taking the place of June as one of the best summer business months in Los Angeles, because many of the summer tourists cannot arrive until July, as they must wait for their children to be released from school in June for the summer vacation. July was very good with the Standard.

Box makers profit by the influx of tourists to Los Angeles, because the visitors are large users of food-stuffs and other goods packed in paper boxes and Los Angeles housewives, with eastern guests visiting them, do not take time to cook at home, but buy more paper-boxed cakes, meats and the like to entertain their company.

It has been estimated, Mr. Ruble declared recently, that if the money spent by tourists in Los Angeles was divided equally among the regular Los Angeles residents, each one would receive approximately \$100 a year.

Give Vacations En Masse

Several Los Angeles paper box plants have adopted the custom of giving all employees their annual vacation at the same time and to shut down their plant during that period. If orders make it possible for this plan to be followed, it is very effective, according to those who have tried it, because they do not have to go through the usual vacation period short handed.

One Los Angeles plant to follow this plan this year was the Hersee Company, Inc., which closed from July 1 to 11. The Hersee Company sent notices to all its customers advising them that the plant would close and asking them to hold their orders.

During the ten-day vacation at the Hersee plant, T. B. Seebaldt, vice-president and superintendent, made a trip to the Yosemite Valley, while C. W. Hering, president and manager, remained in Los Angeles. Mr. Seebaldt went to Yosemite from Del Monte, California, where he attended the 1927 convention of the Pacific Coast Paper Box Manufacturers' Association.

Friedman Forms New Paper Firm

Sam Friedman, formerly of the Grimes and Friedman Waste Paper Company, filed incorporation papers on July 26 for a new company to be known as S. Friedman and Son. The company will do business in Denver, Salt Lake City, Wichita and Tulsa with main offices at Denver. The formation of the company is the outgrowth of a receivership suit of the Grimes and Friedman Company which was settled out of court last month.

Raisin & Zaruba Plan New Home

Raisin & Zaruba, San Francisco manufacturers of paper boxes for the candy trade, are planning to leave

their present quarters on Howard Street this fall for a new building on First Street between Folsom and Harrison Street. The firm has been on Howard Street for more than fifteen years.

The new building is to have three floors of 185 by 125 feet in size. In their present quarters, Raisin & Zaruba occupy six floors and are crowded for space.

New printing and box making machinery is to be installed. They hope to get into their new quarters next month.

The candy box output of Raisin & Zaruba runs into the millions annually.

Holman Explains Paper Box Uses

Rufus C. Holman, secretary of the Portland Paper Box Company, gave an interesting talk last month before the Portland Business Men's Club on some of the articles manufactured in Oregon and the number of different brands of goods put in paper boxes and cartons.

The commodities he described ranged from cookies, cosmetics, cereals, flour, baking powder, to bathing suits and fancy clothing and lingerie. Owing to time limits set on speakers, Mr. Holman did not have an opportunity of showing the complete list of articles and containers he had brought with him.

Waste Paper Company Incorporates

The Pacific Waste Paper Company, Portland, was incorporated early in June with a capital stock of \$25,000. The incorporators are Lyndon L. Myers, Ralph H. King and F. B. Mitchell. Most of the cheaper waste paper bought by the company finds an outlet in fibre mills, while the better grades, consisting of magazines and the like, are sold to New York dealers. The newly-incorporated firm also deals in timber lands, products and lumber.

Standard Boxes Are Globe Trotters

Paper boxes made in Los Angeles are being sent half way around the globe, where they are used for packing Persian "Epicure" dates. The boxes were manufactured by the Standard Paper Box Company for the Gatlin Company, Inc., a Los Angeles food brokerage firm, and are shipped to the city of Eraq in Mesopotamia. Approximately 300,000 boxes will be sent and each box will hold seven ounces of dates "from the Garden of Allah," as the printing on the side reads.

Meyers Gets Appointments

Two appointments to offices in Northwest service organizations were given Charles H. Myers, manager of the Crescent Boxboard mill at Port Angeles, recently. Myers was notified a few weeks ago by the Pacific Northwest Advisory board of the American Railway Association that he had been chosen district commodity chairman of the paper and pulp division. He also received notification of his selection as Clallam county advisor of the Manufacturers' Association, recently.

B. A. Baxter Goes East

B. A. Baxter, vice-president of the Thomas Paper Converting Company, 1201 South Main Street, Los Angeles, left recently for a trip through the eastern states. He will be gone two months. The Thomas Company makes envelopes and paper specialties.

**New Types
New Models
New Machines**

EQUIPMENT

Manufacturers of, and dealers in, equipment used by pulp and paper mills, board manufacturers, converting plants, paper merchants, or any other branch of the industry may make their announcements in this department.

**New Dealers
New Branches
Appointments**



W. J. McGINNIS

West Has Different Methods, Says McGinnis

"Methods used in the West are quite different from those used in the East," remarks W. J. McGinnis, sales engineer with the Smith & Valley Iron Works, Portland, after completing a trip that embraced visits to many of the pulp and paper mills on the Pacific Coast.

"In the East they are using 'matchwood,' while in the West the pulp mills are using timber. This means different methods of handling in the West. From what I have seen I believe we can expect that different lines of machinery than those commonly in use in the East will have to be developed for Western use."

Supply Recording Meters at Longview

The Paper Mill Equipment Company, Portland, reports progress on installations being made in the Longview Fiber Company plant at Longview, Washington. Besides furnishing the soapstone for the recovery system, the company has equipped the new plant with Brown instruments, which include steam flow meters and all recording temperature and pressure gauges.

Beater Rebuilding Becoming Popular

"Rebuilding of old beaters to obtain increased capacity is a coming practice," remarks J. D. Haskell of the Dilts Machine Works, Inc., Fulton, N. Y., upon the occasion of a visit to the Pacific Coast.

Mr. Haskell came West to supervise the installation of several Dilts beaters that are part of the new equipment going into the new paper mill of the Tumwater Mills at Tumwater, Washington. Mr. Haskell spent about two weeks on the West Coast, visiting also the plant of the Cascade Paper Company at West Tacoma, Washington.

"Paper mills have found that the beater room is often the 'neck of the bottle' in the plant," Mr. Haskell states. "Although the paper machine and other units might be speeded up, the output is limited to the beater capacity."

"Installation of new beaters is often impractical because of greater cost of new machines and the lack of floor space. This has turned attention to rebuilding the old beaters. The cost is much less, no more space is needed, and capacity is greatly increased."

Mr. Haskell expected to go to Victoria and Vancouver, B. C., before returning to New York about July 18.

Predicts More Chemistry in Paper Making

Paper makers in the future are expected to pay more and more attention to the chemical problems of manufacture, according to Clark T. Henderson, vice president in charge of sales of the Great Western Electrochemical Company, San Francisco.

"The coming generation of paper makers will probably be a combination of the old line, the men who grew up from the ranks and learned paper making by experience, and a newer group of chemists or technical men. Paper companies are appreciating the fact that the chemist is more than just an analyst."

"The new paper makers will apply their knowledge of chemistry with practical experience in the mechanics of paper making. The result should be a better all around paper maker."

A. H. Cox On Vacation

Oregon and the Crater Lake country was the destination of A. H. Cox, of the A. H. Cox & Co., pulp and paper equipment dealers at 1757 First Avenue South, Seattle, when he left for a three weeks' vacation on July 25. Mr. Cox is motoring and intends to visit many of the scenic spots in Oregon.

Dick Gray Installs at Vancouver

Installation of the new Bagley-Sewall paper machine at Columbia River Paper Mills, Vancouver, Washington, under the supervision of Dick Gray of Watertown, New York, is virtually completed and the new unit is expected to be in operation late this month. This is



DICK GRAY

the second Bagley-Sewall paper machine to be installed within three years in the Columbia Mills under the direction of Mr. Gray, who is delighted to get back to the Pacific Northwest.

Mr. Gray, a native of Scotland, where he served a seven-year's apprenticeship in a machine shop, has been in the employ of his firm for thirty-four years, coming to this country in 1893 from his native heath, where he specialized in the erection of paper mill machines. In addition to this phase of the industry he has had wide experience in building printing presses, paper driers, steam engines and machine work. Beginning his apprenticeship at thirteen years of age, Mr. Gray has acquired a wide training, which gives his employers the utmost confidence in his ability.

What he likes about the United States, he says, is the quick transportation facilities which mean so much when pulp and paper machinery installations are under way.

In line with the expansion program being carried out by the Columbia River Paper Mills, construction was scheduled to start early in August on a 60x200 brick and concrete structure to be used as a warehouse and shipping room. The building is expected to be ready for occupancy within two months. The added unit will double storage space utilized by the company.

A fourth digester, manufactured by the Willamette Iron and Steel Works, Portland, is now being installed and is expected to be in operation about September 1. The third digester was placed in operation early this year, the first two having been installed about three years ago when the mill was opened.

Beaters and two Jordans, the latter furnished by Smith and Valley Iron Works Company, Portland, are on the ground and will be set up this month.

Appleton Builds Extension

Demands of customers of the Appleton Wire Works for a wider Fourdrinier wire is causing the company to erect an \$18,000 brick and steel addition on its property at Appleton, Wisconsin, according to G. E. Buchanan, secretary and treasurer of the firm. The enlarged plant will now occupy the entire block bounded by N. Union, E. Hancock, N. Lawe and E. Atlantic Streets. The company formerly occupied only the southern half and then expanded to the northeast corner. In order to make the wider wire more equipment and machinery is needed, and the addition is being built to house them.

Develop Special Alloy, Steel

"Dependable machinery being of paramount importance in pulp and paper manufacture because of the tremendous losses involved when breakdowns occur has caused us to develop a special nickel alloy," states Fred Hesse of the Hesse-Erstad Company of Portland. "This new alloy approaches steel nearer than any other mixture. It has a tensile strength of 40,000 pounds and has a very high resistance to wear. It is a close grained metal, shows a high polish and is well adapted for bearing surfaces. We are using this alloy in our machines which are subject to special stress.

American Wringer Representative Returns

William E. Brown, sales manager of the mechanical rubber division of the American Wringer Company, Woonsocket, Rhode Island, returned to the East in late July after an extensive trip that embraced all of the Pacific Coast and British Columbia. Mr. Brown visited many of the pulp and paper mills, going as far north as Ocean Falls, B. C., to visit the Pacific Mills, Ltd. He returned East by way of the scenic Canadian Rockies.

More Olivers

"During June 'Olivers' were shipped to paper mills in California, Massachusetts, Quebec, New York and Washington," writes the Oliver Continuous Filter Co.

"The California shipment consisted of three Save-Alls to the Floriston mill of the Crown Willamette Paper Co., and that to Washington was a Lime Mud Washer for the new mill of the Longview Fiber Co.

"The National Paper Products Company have placed an order for five 'Olivers' for the new Zellerbach mill at Port Townsend, Washington."

Correction for United Filters

In the descriptive story of the Powell River Company, Ltd., mill, appearing in the July number of Pacific Pulp and Paper Industry, on page nine the United Filters were described as follows:

"Each of these machines produces 1,400 to 1,500 U. S. gallons per minute of white water at a consistency ranging from 0.8 per cent normal, up to 0.20 per cent during periods when a break occurs on a machine."

The first figure is in error and should have read "from 0.08 per cent normal, up to 0.20 per cent * * *."

In the advertisement of the United Filters Corporation, appearing on page 39, the statement was made, "Consistency of the white water ranges between a normal of 0.08 per cent to a peak of 0.20 per cent when a break occurs. Filter effluent 0.10 per cent to 0.008 per cent."

This statement should have read, "Filter effluent 0.01 per cent to 0.008 per cent."

A Monthly Reminder

The Coast Carton Company, Seattle, keeps in touch with the trade by sending out desk calendars each month that are real examples of printing and cutting that can be done in their plant.

Power Application Rejected

The Federal Power Commission has rejected the application of Mr. Paul Howard Kollinz for a power development permit on the Speel River in the Tongass National Forest, Alaska.

Mr. Kollinz was represented before the commission by a group of San Francisco attorneys.

EDITORIAL

Wasting from thirty to forty per cent of a crop that takes from fifteen years to as much as several centuries to mature ought to be a matter of some concern. The economic loss is appalling, yet in the past there has appeared to be justification in tolerating the loss. The

**Douglas fir region of the Pacific
New Fields
For Engineers
To Conquer**

Coast has necessitated, because of its huge trees, the development of the heaviest logging machinery to be found anywhere. With such massive machinery the overhead and operating costs are extremely high, and to operate profitably the cry is ever, "More Production." And quantity production is what the loggers of the Pacific slope have obtained, quantity production of big tree logs, with the intermixed smaller trees—principally Western Hemlock—pulled down, broken, destroyed in the process.

The logger's plea that this small stuff couldn't be handled profitably is justified. The plea, however, does not eliminate this thirty to forty per cent loss of wood that is largely suited for pulp. Expansion of the pulp industry on the Pacific Coast is centering attention upon methods of salvaging the loss. Saving the woods waste is the next step after saving mill waste, and the problem is probably of even greater importance.

Very little study has been given to the problem of saving woods waste thus far. This is to be expected, as the matter is purely economic. The Crown-Willamette Paper company has, however, done some valuable pioneer work. They have experimented with different types of equipment. Their results mean essentially this, that woods waste can be profitably saved by the employment of suitable light equipment.

Saving the woods waste, or "relogging" as it is sometimes called, is a logging operation quite distinct from general logging. It opens a new field upon which the technical engineer and practical logger can concentrate and cooperate.

**Always
Room for
Quality**

Quality is an item easily overlooked. It has been pointed out by those in a position to know that all pulp is not just pulp, but that from the same wood, same machinery, and the same process three kinds of pulp can be produced, namely, good, bad and indifferent. Of the second two kinds there is already an abundance on the market. The market for the first is not overstocked and probably will not be at any near future time. The Scandinavian pulp producers have established a reputation for high quality, and they are the ones with whom the Western producers must compete. It is therefore of prime importance that quality be kept to the forefront in the manufacture of Western pulp. Sufficient competent engineering expression has given to assure the West that from its woods can be produced pulp that is the equal of that produced anywhere else. It remains then for the West to so combine engineering skill with its advantageous supply of raw materials and power to put on the market a superior pulp that will find a preferential demand wherever marketed.

Who else do you know that ought to be a regular subscriber of Pacific Pulp and Paper Industry?

Kelso Paper Company Incorporates

Articles of incorporation for the Kelso Paper Company, Kelso, Washington, capital stock \$200,000, were filed July 7. P. J. Gallagher and Stephen F. Gallagher, both of Portland, and Earl A. Knight of the Kelso Investment Company are the incorporators. Walter Clifford, for the past year consulting engineer for the Crown-Willamette Company, will be president and manager of the company.

The new president, Mr. Clifford, brings to his work a broad experience in the pulp and paper business, having been identified with the industry since 1911. Previous to this connection with the Crown-Willamette concern, he was identified with the Champion Fibre Company of Hamilton, Ohio, and the Warsaw Sulphate Company at Mosinee, Wisconsin. He is also credited with being the first man in the United States to perfect and adopt the same kraft paper process discovered and used by Norwegian paper men.

Oregon Pulp Sells New Issue

An issue of \$330,000 first mortgage 6 per cent serial gold bonds of the Oregon Pulp & Paper company of Salem is being offered. The coupon bonds are in \$1,000, \$500 and \$100 denominations, due serially, 1928 to 1941.

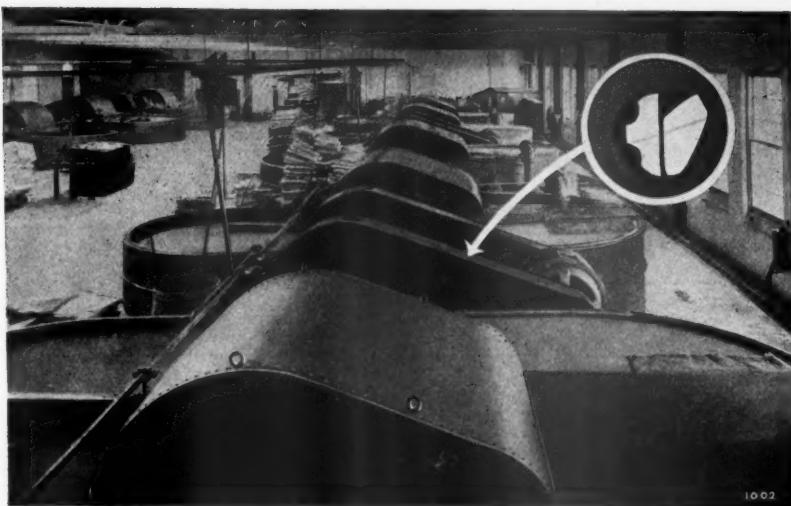
These bonds which are being issued to take care of plant improvements and the retirement of current indebtedness, together with \$980,000 series. A bonds outstanding, are secured by a first mortgage on the fixed properties of the company. These pledged assets have a depreciated book value of \$3,282,000, or more than 2½ times the bonded debt. Net earnings of the company, before depreciation and income taxes, have averaged during the past three years 4.17 times the maximum interest requirements of all outstanding bonds. After depreciation, but before income taxes, they averaged \$202,261 per annum, or 2.57 times the interest requirements.

Extensive additions and improvements to the company properties made during the last year have been practically completed and it is expected that the capital expenditures will be reflected immediately in substantially increased earnings. The company is engaged in the manufacture of high grade sulphite bond and other paper, including glassine, grease-proof papers and tissues. F. W. Leadbetter is vice-president and one-half owner of the Spaulding Logging company, which owns over 1,000,000,000 feet of standing timber in the watershed tributary to Salem.

Japan Interests Paper Production

The mills of the Japanese Paper Manufacturers' Association report an output of 134,377 short tons of paper during the first three months of 1927 as against 123,056 tons during the corresponding quarter in 1926. Production of newsprint, which represents about one-half of this output, shows a slight increase over last year, while production of best grade printings dropped off by nearly ten per cent. The output of ordinary printings other than newsprint, wrapping papers, and "torinoko" paper, which make up the greater part of the remaining production, in all instances exceeded the output of the first quarter in 1926.

Hugh Peat, San Francisco, secretary of the Pacific Coast Paper Box Manufacturers' Association, returned to his office early in August from a vacation trip to Canada.



80 H. P. Morse Silent Chain Drive from motor to 2 Jones Type Beaters. Speed Reduction—Driver, 460 r.p.m., Driven 85 r.p.m.

A Power Saver for Power Users

Many paper and pulp mills are saving power by driving their machinery with Morse Silent Chains. Beaters, pumps, paper machines, shaker screens, blowers, etc.—whatever the type of service, Morse Drives will give dependable results.

Their adaptability to short centers makes convenient machine sparing possible. 98.6% sustained efficiency, positive, flexible. One tenth or 5,000 H.P., the same economy is possible.

Morse Transmission Engineers are experienced in accurately applying the drive to the job. Consult the nearest office below in solving your power problems.

MORSE CHAIN CO., ITHACA, N. Y., U. S. A.

ATLANTA, G. 702 Candler Bldg., Earl F. Scott & Co.
BALTIMORE, MD. 1002 Lexington Bldg.
BIRMINGHAM, ALA. Moore-Handley Hdwe. Co.
BOSTON, MASS. 141 Milk St.
BUFFALO, N. Y. Ellicott Square Bldg.
CHARLOTTE, N. C. 404 Commercial Bank Bldg.
CHICAGO, ILL. 112 W. Adams St.
CLEVELAND, OHIO. 421 Engineers Bldg.
DENVER, COLO. 211 Ideal Bldg.
DETROIT, MICH. 7601 Central Ave.

LOUISVILLE, KY. 516 W. Main St., E. D. Morton Co.
MINNEAPOLIS, MINN. 413 Third St.
Strong-Scott Mfg. Co.
NEW ORLEANS, LA. A. M. Lockett & Co., Ltd.
Queen & Crescent Building
334 Camp St.
NEW YORK, N. Y. 50 Church St.
OMAHA, NEB. 923 W. O. W. Bldg.
D. H. Braymer Equip't. Co.

PHILADELPHIA, PA. 803 Peoples Bank Bldg.
PITTSBURGH, PA. Westinghouse Bldg.
SAN FRANCISCO, CALIF. Monadnock Bldg.
ST. LOUIS, MO. 2137 Railway Exchange Bldg.
TORONTO, 2 ONT., CAN. 50 Front Street, E.
Strong-Scott Mfg. Co.
WINNIPEG, MAN., CAN. Dufferin St.
Strong-Scott Mfg. Co.

OST1379

MORSE SILENT CHAIN DRIVES



The Diamond Z, New Tow Boat for Port Angeles Service

Washington Pulp Goes Boating

Large demands for towing service has caused the Washington Pulp and Paper Corporation, Port Angeles, Washington, to add a new piece of equipment to the plant, namely a 55-foot gas-powered tug boat.

The Diamond Z., recently put into commission for the Port Angeles plant, is 55 feet long by 14-foot beam. Its service will call for a great deal of work in the Straits of Juan de Fuca, where it will be exposed to the sweep of the open sea, and for that reason seaworthiness was an important consideration in building. There is a fairly high freeboard and sturdy bulwarks for some distance aft the bow.

The design follows conventional workboat lines with pilot house well forward and Texas aft containing sleeping quarters. After trial runs, the Diamond Z. made the trip to Port Angeles in six hours and 39 minutes, an average speed of 9.6 knots for the distance of 63½ nautical miles.

The tug is powered with a six-cylinder Hall-Scott gasoline motor of heavy duty type, operating a reduction gear which gives a propeller speed one-third as fast as that of the engine.

Towing service at Port Angeles includes towing of scows of pulp wood from the western slope of the Olympic peninsula.

New Building at Woodfibre

The British Columbia Pulp and Paper Company has just awarded a tender for the construction of new buildings at the Woodfibre plant. The building will cost \$20,000 and the equipment approximately \$80,000, this new equipment being designed for the purpose of improving the quality of the pulp.

DeCue Made Assistant at Port Alice

Changes have recently taken place at the Port Alice mills of the British Columbia Pulp and Paper Company under which Reginald M. DeCue has become assistant mill superintendent. Mr. DeCue, who is a graduate in chemical engineering has been assistant chemist at Powell River Paper Mills.

He was formerly on the staff of the Whalen Pulp and Paper Company before it was taken over by the British Columbia Pulp and Paper Company, and was at one time night superintendent of the Kenogami sulphite mills of Price Brothers & Company.

Later he was associated with Process Engineers, Inc., New York. His qualifications fit him for chemical work at the mills, but his present position is not in the chemical department, where there is already a staff of four or five experts. He is in charge of a portion of the mill, and checks up on the operations, tests for losses, and watches the efficiency of that part of the

mill according to Lawrence Killam, general manager.

The company's pulp mill superintendent left some time ago for another position, and under the arrangement that followed the job of the plant superintendent was considered to be too heavy for one man, with the result that Mr. DeCue was appointed as soon as he became available, the idea of the management being that a much closer watch was necessary in the manufacturing processes.

Colorado Company Facing Difficulties

With the appointment of a receiver, a court order for an accounting before a referee court, a voluntary petition of bankruptcy by vote of ousted officers, an involuntary petition of bankruptcy by creditors and action on the part of present officers against both bankruptcy petitions the Colorado Pulp and Paper Company of Denver is approaching a crisis in its affairs. Hearing on the protested bankruptcy petitions will be heard before Federal District Judge J. Foster Symes on August 25.

Charles B. Myers, founder of the Myers Pulp and Paper Mill which was taken over by the Colorado Pulp and Paper Company in 1925, brought suit against the officers of the latter company demanding an accounting and restoration of certain rights claimed to be lost in the transaction. The suit was held in the district court at Brighton before Judge S. W. Johnson in May.

The decision handed down on May 16 provided for the appointment of a receiver, the turning back into the company of certain stock issued to Joseph Buchhalter in payment of money advanced by him as a loan to the company subsequent to the organization of the company, an accounting of all monies, goods, profits or benefits accruing to Buchhalter since the time of his acting as promoter of the company and denying any further management or control to Buchhalter and the other defendants.

George W. Beck was appointed receiver and assumed control. Harry Beham of Brighton was appointed referee. At this writing the accounting has not been fully made, though certain facts have been brought out in hearings before the referee.

Proceedings are held up at present pending accurate information on the purchase of claims at the inception of the Colorado Pulp and Paper Company. Present figures show the company to be solvent with assets of over \$734,000 and liabilities of approximately \$332,000. Revised figures are expected to set the assets somewhere in the neighborhood of \$463,000. Included in the assets are cash and accounts receivable of approximately \$40,000 and finished goods and stock on hand of \$25,000.

That the company has lost money steadily is indicated by figures of \$614,000 worth of business handled in 1926 with a loss of \$24,153, better than \$2,000 a month. For the first four months of 1927 \$126,000 worth of business was accomplished with a loss of \$21,000.

On July 23 four members of the board of directors filed a petition of voluntary bankruptcy. This action has been protested by new officers and directors elected at that time. On July 25 an involuntary petition of bankruptcy was filed by creditors, the Louisiana Pulp and Paper Company being the heaviest creditor. At the hearing in August one of the points to be decided by Judge Symes will be whether Myers, who was elected president by the board on July 23, or A. H. Dougal, former president, is the rightful one.

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Wollenberg Warns on "Epidemic" Construction

In connection with the announcement made recently that the Longview Fiber Company, Longview, Washington, would add a paper machine to its kraft pulp mill now under construction at Longview, President H. L. Wollenberg points to the necessity of taking into consideration factors of advantageous supplies of wood, water, power, fuel, shipping facilities, technical skill and financial resources, in building a pulp or paper mill.

"It is hoped the Longview Fiber Company's action in extending its project in Longview will not be interpreted as endorsement of the wave of paper mill construction which has reached epidemic proportions in the Northwest," Mr. Wollenberg said.

"World production capacity for pulp, news print and sulphite paper," his statement continues, "already exceeds consumption and over-production of all grades is inevitable if even part of the new projects are really carried out.

Economic Size Big Factor

"Use of sawmill waste as a basis for pulp and paper production is a chimera unless a suitable grade is available continuously in sufficiently large quantities to operate a pulp and paper mill of economic size. On ordinary grades of paper the economic size of a mill is certainly well above 100 tons per day. It is a common mistake to over-estimate the amount of sawmill waste available from a given cut of lumber and to seriously underestimate the cost of gathering, transporting, preparing and chipping the waste.

"To survive inevitable severe domestic and foreign competition, mills must be very advantageously situated as to supply of wood, fresh water, power, fuel, labor and railroad and marine shipping facilities. To all these conditions must be added the financial resources and technical skill which are needed in such large measure in this particular industry. The marketing of the output is also a major problem, as channels of trade in the paper industry wear deep and new producers who do not control marketing outlets sell their product only with difficulty and often by serious sacrifice of price and profits.

Essential Factors at Longview

"This company is increasing its output to round out its development to an economic size and to realize on what it believes to be its exceptionally favorable situation in all essential factors.

"Waste wood, hog fuel, and part of the electric power requirements for the entire project will be purchased from the Long-Bell Lumber Company."

"The Longview Fiber Company has placed an order with the Beloit Iron Works of Beloit, Wisconsin, for the construction of a kraft paper machine which is expected to be shipped in December, 1927, to be erected and operating at Longview in March, 1928.

"The kraft pulp mill, machine room, power house and service facilities already included in the initial construction program, now nearing completion, are already large enough to accommodate the additional paper machine.

"When operations are initiated about October 1, 1927, the daily production of the plant is expected to be 100 tons of kraft pulp and 100 tons of container board. The pulp production will be increased so that by the time the additional paper machine is installed, about 30 tons per day of kraft pulp and paper will be added to the output of the plant, making a total daily

production of 130 tons of pulp, 100 tons of container board, and 30 tons of paper.

"The additional expenditure involved in the installation of the paper machine and auxiliaries amounts to several hundred thousand dollars. As in the case of the mill now building, no public financing has been done by the company," Mr. Wollenberg announced.

Big Crew Pushes Longview Work

Construction crews on the Longview Fibre Company's immense pulp and paper plant on the Columbia River waterfront at Longview, Washington, have been increased to 340, speeding the work of construction so that the plant will be ready for operation by October of this year.

The exteriors of the concrete and steel buildings are practically complete; steel sash windows are in place along one entire side of the plant and the work of inserting the thousands of panes is under way. Machinery in 500-ton shipments is arriving from the East in regular consignments. Approximately one-half the machinery of the plant is already installed.

Trucks are operating daily between the new plant and the Long-Bell Lumber Company's plants, transporting Douglas fir blocks which will be used as raw material. By the time the plant is put in operation, more than 100,000 tons of waste Douglas fir block wood will be ready for use.

B. C. Forest Service Establishes Lookouts

The British Columbia forest service has now provided sufficient fire lookout stations to protect practically the whole of the big pulpwood area along the coast between Vancouver Island and the mainland, the last one to be established being on Pocahontas Mountain, Texada Island.

The government believes that the stationary lookout system is more effective than aerial or other methods of fire observation because of its permanence. The Pocahontas station was completed last month. Other stations commanding a view of coastal timber are at Thurston Bay, Mount Benson and Mount Sonora. These lookout stations form a valuable link in the protective service applied to timber of such mills as the Powell River Company, Pacific Mills, B. C. Pulp & Paper Company, Crown Willamette.

The fire situation has so far been unusually favorable in British Columbia and at the beginning of July no important outbreaks had been reported. Airplane patrol is being maintained in the Nelson district, where severe losses were suffered last year owing to lightning blazes.

Work at Hoquiam Is Speeded

Preliminary construction of the plant of the Grays Harbor Pulp Company, Hoquiam, Washington, is moving forward rapidly. Clearing of the site is practically completed. Pile driving operations are being pushed. Late in July three drivers were at work and flood lights were being installed to carry on the work at night.

Chris Kuppler & Sons, who have the building contract, are on the job and expect to be able to begin framing operations preliminary to concrete work late in August.

A new wagon road into the site has been built and a fill for a railroad spur is also being constructed.

Pulp Paper



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Major Livingston G. Irving, Madeline Irving and Mrs. Irving with the Pabco Flyer which the Paraffine Companies, Inc., financed for the Trans-Pacific hop

Pabco Flyer in Hawaii Hop

"I'd like to get into the race to Honolulu", remarked Major Livingston Irving, war ace and now a roofing engineer with the Paraffine Companies, Inc., one Wednesday evening last May just after James Dole of the Hawaiian Pineapple Company had posted a prize of \$25,000 for the first birdman to fly from California to Hawaii after August 12.

The young major's father, S. C. Irving, treasurer of the Paraffine Companies and former mayor of Berkeley, Calif., overheard his son's remark and in a casual way mentioned it the next day to R. S. ("Dick") Shainwald, vice-president and general manager of the company, and Irving's "pal" since boyhood.

Immediately the wheels were started in a successful drive for the necessary funds and, as a result, "Liv", as he is known to his fellow workers of Paraffine, was financed to make the attempt in a proud giant monoplane, named the "Pabco Pacific Flyer", bearing the hopes of his company and the best wishes of paper men up and down the Pacific Coast.

Practically everybody in the Paraffine Companies helped raise the needed \$20,000 to defray the cost of the flight. Quotas were set for the different branches and by the middle of June the Emeryville plant, the San Francisco Carton and Container plant, the San Francisco office, the Board and Paper Sales Department or San Francisco, the Northern Board Mills and the Seattle office all had exceeded the amounts given them. By the end of the month every division in the company had gone over the top. The employees raised \$10,000 and the company matched this with another \$10,000.

Major Irving is a veteran flyer with a World War record under French and American colors which brought him the Distinguished Service Cross, the Croix de Guerre Fourarguerre, and the Victory Medal with six bars.

The major's plane has a Wright "Whirlwind" motor of the same type as that used by Colonel Charles Lindbergh in his historic New York-Paris flight. Lieutenant Harold Edgar of the Emeryville plant of the Paraffine Company, helped Major Irving prepare the plane. The major flies alone.

Ramar Process Disappoints Union Bag

"Persistent liquidation of Union Bag & Paper," remarks the Wall Street Journal on July 25, 1927, "which

has carried it down steadily from the year's high of 73 1/4, has been accuated by disappointment over the failure of the Ramar process of paper making to live up to the high hopes entertained regarding it. This process had been expected to increase the company's profits greatly through reduction in production costs. However, Union Bag finished the first six months this year with a loss after normal charge-offs for depreciation. In the full year 1926, the company had a deficit of \$180,039, compared with net profit of \$223,083, \$1.52 a share, earned on 146,043 shares of capital stock in 1925. Union Bag had \$1,100,000 bank loans at the end of 1926. Cash on hand was \$396,405."

"Don't Write—Telegraph"

Port Townsend, on the northeastern tip of the Olympic peninsula in Washington, boomed in the late eighties as the Key City. Big office buildings sprang up in anticipation that Port Townsend would become the Pacific Northwest terminus.

But the bubble was pricked, the growth failed to materialize, and for decades Port Townsend remained a ghost city with a handful of population, most of whom were on the federal government payroll in the immigration or customs services or army.

Then came the news that the Zellerbach interests were seeking a location for a kraft mill. Some \$2,500,000 was to be spent. Port Townsend had a good chance to get the mill from point of advantages of harbor, wood resources and other favorable factors.

The Zellerbach officials came, looked over the site, and went back to San Francisco. Port Townsend had no water to offer.

But Ed Sims, known to all in Port Townsend, knew that the water could be furnished if Port Townsend would vote favorably on a proposition to spend approximately \$800,000 to bring in an industrial water supply.

He hurried to San Francisco, interviewed the men who guide the Zellerbach corporation, but was told that water bonds meant an election, and that an election meant a delay. Zellerbach wanted to get at the building of this mill.

"Suppose we underwrite the water bond issue up to the time of the election," Mr. Sims asked. "That will guarantee you against loss. I'll have a guarantee on your desk within a week."

"It couldn't be done," the Zellerbachs said. But they gave him the week.

Sims wired his colleagues at Port Townsend to stir things up. They rushed out handbills for a mass meeting, and when Mr. Sims arrived at Port Townsend the town was out to hear all about how it could be lifted from the dumps and really get this big mill.

The people listened and turned to the job with a will, pledging that they would vote for the water bond issue. Ninety-seven per cent of the qualified voters, 915 men and women, signed the pledge.

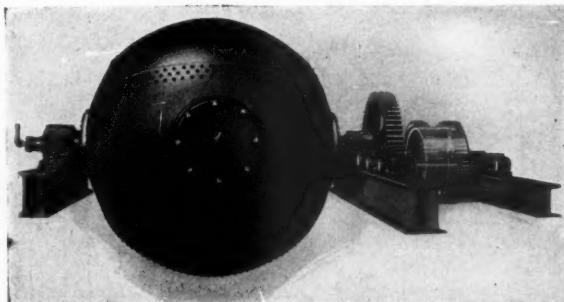
The morning after the Fourth of July a San Francisco telegraph messenger boy staggered into the Zellerbach offices with a telegram from Ed Sims of Port Townsend. It contained 3000 words and included the name of every one of the 915 signers of the pledge.

And Port Townsend got the kraft mill.

C. E. Forbes, of the Vancouver office of the Powell River Company for several years, has gone to Powell River to become manager of the company's department store, replacing E. W. Rawson, resigned.

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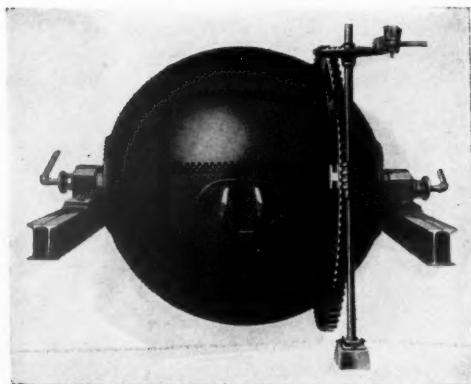
Each rivet head and all seams on the inside of the digester are electrically welded for protection against the penetration of the bleaching liquor.

Suspended vertically, properly counter balanced and equipped with cast steel journals and gear drive, the revolution of Biggs Digesters provides the necessary agitation during operation.

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Biggs Rotary Cold Bleaching Engines successfully handle paper making pulp up to 35% consistency with a remarkable saving in time, labor and expense.

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Winning Salmon Packers to Fiber Cases

Would Add Good Board Tonnage

Paper, in one form or another, still has large fields to conquer, according to Charles Meyers, resident manager of the Crescent Board Mills branch of the Parafine Companies, Inc., at Port Angeles, Washington.

Mr. Meyers points to the salmon canning industry as one example of an industry that is using containers other than paper. "If the salmon packers of the Pacific Coast could be educated to the use of fiber boxes, it would mean a very substantial increase in the board tonnage on the Coast," Mr. Meyers stated recently.

"The problem is to sell the canner," Mr. Meyers said. "I believe that eventually the board manufacturers will get this business, but some educational work must be done. The canner has to be sold on the idea, and the wholesaler as well. This is going to require some real missionary work, but I am sure it can be done."

Fields of Wooden Cases

"Not long ago I visited a dock warehouse in Seattle and saw literally fields of salmon cases which had just come in from Alaska. They were all wooden cases, with the exception of a sample shipment of cans in fiber cases.

"I noticed that there was a large repair crew fixing up the wooden boxes, while the fiber box shipment seemed to have come through in first class order."

Mr. Meyers points out that existing prejudices against the fiber container as not being substantial enough for shipment of cases of canned goods really has no foundation. Test shipments have shown the fiber container to be satisfactory. Fiber has been developed to such a stage that containers made from it are able to stand a great deal of water without disintegration.

"The trouble with the wooden box, as I see it," Mr. Meyers said, "is that the shooks are so very often poor in quality, full of knots and of low grade lumber. Being so, it doesn't take much rough handling to make them completely fall apart. There are no weak spots in the fiber container."

Must Go After the Business

"Winning over an industry like the salmon packing industry, which represents a big field for the fiber box container, is going to take real work. The business isn't going to come walking in. The business can be had, but we will have to go out and get it, show the salmon packers that we have something which they can use to advantage. Once we have sold them, there will not be much question about keeping them sold."

There are other fields for paper containers which need further cultivating on the Pacific Coast, Mr. Meyers states. The Pacific Coast is still importing a considerable tonnage of oyster and ice cream pails from the East. Further, Mr. Meyers sees no reason why the Pacific Coast should not be sending some tonnage of western board products to the East.

The Paraffine Companies began as manufacturers, disposing of their products through jobbers, but they realized that to really go after the business and do the thing right, they would have to go into the selling end of the business. Since entering the selling field a few years ago, they have made it a point to go after the business. Control of the sales end has also enabled them to guide the manufacturing end with better control.

A Seasonal Production

Production of board is seasonal, Mr. Meyers states. The two summer months of July and August are usually dull, but in September the business annually

picks up rapidly. Ending of the summer vacation period unquestionably has an effect in this revival of business, Mr. Meyers believes.

"Experience alone can teach you what to produce and how much to produce," Mr. Meyers declares. "The passing years make our experience increasingly valuable and enable us to gauge production."

Powell River a Big Exporter

The Powell River Company is now regarded as the pre-eminent paper exporting company in Canada, and during the past few months it has pioneered in fields that previously had been regarded as too remote for contemplation.

One of the most important developments in the company's export business was marked by the departure from Powell River of the Osaka Shoshen Kaisha liner Paris Maru with 500 tons of newsprint for South Africa. The paper has been sent as a trial shipment for newspapers printed in Johannesburg and it is expected to be the forerunner of a valuable export movement. Norwegian and Swedish paper is the only competitor in that field at present and with the imperial preference in force it is expected that the British Columbia company will be able to undersell the Scandinavian product.

Transportation is the chief handicap in that market, as sailings are infrequent, but the company is now negotiating with Dingwall, Mitchell & Company, a subsidiary of Dingwall, Cotts & Company, for the establishment of a regular steamship service to South Africa. Newsprint cargo would be augmented by British Columbia lumber and canned salmon.

Another market that is being invaded by the Powell River Company is Cuba and one of the large Havana newspapers is now buying Powell River newsprint exclusively. A trial shipment was recently dispatched to Trinidad and to Martinique. The company already has a firm foothold in the Argentine and its shipments to Buenos Ayres total approximately 12,000 tons annually. The Argentine consumes about 90,000 tons a year altogether.

The company is making regular shipments to Colombia. Since the preferential tariff was adopted the Powell River company has increased its business with Australia enormously. Japan, being a buyer of pulp and not paper, does not enter into the situation so far as Powell River is concerned.

B. C. Watching Minimum Wage Law

Pulp and paper operators in British Columbia are watching with considerable interest the enforcement of the minimum wage law in connection with the lumber industry. So far the lumber industry is the only one affected by this law, which became effective in November, 1926, but the government has announced its intention of extending its scope to include pulp and paper and all other industries.

During the last few months a survey of the pulp and paper industry in British Columbia has been made with a view to ascertaining general conditions and fixing a reasonable minimum wage. In the lumber industry a minimum of forty cents an hour has been fixed, and it is expected that a similar amount will be applied in the pulp and paper mills and camps.

Whether this will have an important effect on the industry operators are not yet prepared to say. Before making any comment on the law they are waiting for a definite pronouncement from the government and more definite information as to the amount of the minimum.

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How's Business?

Vancouver, B. C.

This is going to be a prosperous year in British Columbia, according to present indications. Money is freer than usual, all the basic industries are active, the building expansion continues, collections are reported showing a steady improvement and there hasn't been a trace of labor trouble in any line for months.

British Columbia's total industrial payroll was computed to be \$175,000,000 in figures just released by the provincial government and this shows an increase of \$15,000,000 over last year, indicating a healthy development.

Building has been active throughout the province, especially in Vancouver, where permits representing an outlay of \$12,121,000 were taken out during the first seven months.

Lumber mills and logging camps are busy, although prices are still depressed. Canners expect a good year, but the salmon pack threatens to be unusually late. Fruit conditions are likely to show the beneficial effect of the new co-operative sales legislation brought down at the last session of the legislature.

Tourist business is breaking all records as a result of the opening of new highways and the continuance of an aggressive advertising campaign.

Portland

A survey of conditions in Portland and throughout Oregon show business to be fairly well stabilized, despite the fact that a general slowing up in various activities has been predicted for July and August of this year. While nothing spectacular is reported in the lumber industry, the demand is good with little fluctuation in price. Buying on a large scale is somewhat curtailed temporarily, owing to rumors of a merger that will affect lumber interests. Most of the camps continue active, however.

The outlook for crops, particularly wheat, appears excellent, winter grain being the midst of harvest, with reports that the yield is excellent and of high quality. Spring wheat is about ready to cut, and there appears no instances of black rust having any important effect on crops. Weather conditions are favorable, thus insuring bright prospects for harvest.

Dairy products are enjoying a good demand, with prices firm for products. Canneries are running full blast with indications of a good fall pack.

Call money is reported easy, and plenty of money is available for legitimate enterprises.

San Francisco

Trade was quiet in July in San Francisco, Oakland and other cities of central California, according to a monthly bulletin issued August 1 by the American Trust Company.

A good fall business was expected, however, the bulletin said and it was predicted that there would be ample capital at easy credit rates. In general lower profits in business were predicted for the second half of the year.

California's summer tourist trade was reported heavy this year, with the result that business was good in the hotel, restaurant, automobile supply, reconditioned automobile and other lines serving the traveler.

The Federal Reserve Bank announced in July that sales of 99 reporting retail stores during the first six months of 1927 were 3.2 per cent larger than during the first six months of 1926 throughout the twelfth federal reserve district. In the wholesale trade, 182 dealers in 11 lines reported business 2 per cent lower for the first half of 1927 than in 1926.

In Oakland, the department store sales of June were 4 per cent higher than the monthly average of 1923-25, while in San Francisco, they were 6 per cent lower. This decline was blamed to the usual summer seasonal slump.

S. W. Straus & Co., San Francisco, bond dealers, who compile monthly reports on building permits, reported that June permits in 93 Pacific Coast cities were 23 per cent lower than in June of 1926. Increases were shown in some central California cities, however, among them being Berkeley, Redwood City, Eureka and Stockton. In San Francisco, June building permits totaled \$3,926,432 as against \$8,479,058 for June of 1926.

California's raisin crop was reported good, with the market acceptable. A price war between growers and canners has delayed the start of the peach canning season and opening prices on canned goods had not been announced on July 28. It was predicted, however, that the prices would be lower than last year.

Los Angeles

The middle of the summer vacation period offers an opportunity for reviewing in an unprejudiced way the business situation in Los Angeles as we find it after the first seven months of 1927. Our industries are for the most part active, with records for the first half year well ahead of last, and in some instances to a surprising degree. The population, bank clearings, construction of all buildings except those publicly owned, post office receipts, carloadings, commerce in the harbor, automobile registrations and many other indicators show large increases; in the few cases where there are decreases as against last year such as in sales of new automobiles, gross volume of building permits and possibly one or two other indices, the decrease is less than in other cities of the United States or of the Pacific Coast. The Los Angeles business man if he gets a correct view of the local scene as well as its relation to the greater picture of business in the United States as a whole, will unquestionably find his position relatively very favorable, and the general hue of the local situation bright.

Seattle

Retail merchants were expecting a stimulation of business in August with the coming of "Fleet Week" and several important conventions and expositions. The usual dullness has been experienced during the summer vacation period. Tourist business has been good with favorable weather prevailing. Lumber production has continued good, with some of the camps running longer this year to supply the mills. Low fire hazard this year has favored cutting in the woods. Building construction remains active, with several large downtown structures being built.

Paper in the Orchards

North Central Washington is expected to harvest 15,108 cars of apples this year according to estimates compiled from figures furnished by 413 representative growers. This is slightly less than last year, but ten per cent variation either way must be allowed for climatic conditions, it is said. Conditions for growing have been favorable to tree fruits. Apples are expected to average larger in size this year.

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Roger W. Babson Predicts Development

Roger W. Babson predicts that the largest city in the United States will be situated on the Pacific Coast within the next twenty-five years. The statement was made by the statistical expert when in Seattle on July 4.

"The spirit of the people will be the determining factor," Mr. Babson remarked.

"A study I had made showed twenty-five cities in the world with a population of over 1,000,000. Of these twenty-five, twelve are in the Orient, next door neighbors to the United States Pacific Coast ports in foreign trade.

"While the present situation in China is temporarily upsetting things, the ultimate effect will be to awaken the great empire.

"The Pacific Coast in general has three outstanding advantages in the swing of population and commerce westward. These are:

"First—The psychological reason that residents of the Pacific Coast like their region and are the greatest regional boosters extant.

"Second—The character of the agricultural products of the Pacific Coast are in line with the present trend of civilization. One reason that the Central West is less prosperous is that the per capita demand for wheat and corn is lessening, while that for fresh fruits and vegetables—products more peculiar to the Pacific Coast—is increasing.

"Third—The possibilities in the development of the Orient.

"There is no question but that the Pacific Ocean is going to take the place of the Atlantic as the market place for world trading."

Test New Zealand Woods at Madison

Alex R. Entrican, engineer in forest products of the New Zealand State Forest Service, has arrived at the United States Forest Products Laboratory at Madison, Wisconsin, with two carloads of New Zealand grown woods, both native and introduced, which the laboratory will test for paper-making qualities. All of the well-known pulping processes will be used in the tests, as well as the semi-chemical process which has recently been developed at the laboratory. Three hundred logs and a considerable quantity of slab wood make up the shipment. There are six species in all. Monterey pine, indigenous to the Monterey Peninsula in California, rimu (*dacrydium cupressinum*), the dominant New Zealand softwood, and tawa (*beilschmiedia tawa*), a New Zealand hardwood, are the species about which information is most desired. The three other species, European larch, Austrian pine, and Corsican pine, will also be tested.

Mr. Entrican states that the pulping tests are being carried out because New Zealand foresters are obliged to find uses for the thinnings from extensive forest plantations which are just reaching thinning age in his country.

Experimenting With B. C. Interior Pulpwood

The British Columbia government is making an interesting experiment in the propagation of pulpwood in the central interior.

Work is going ahead at the 6,000-acre forest station at Aleza Lake, B. C., under the supervision of P. M. Barr, of the provincial forest service. The object of the station is to secure a second growth of spruce timber on lands which have been cut over.

It is believed by the forest authorities that the greater

part of the lands along the Fraser River, to the east of Prince George, have a greater value in the production of pulp timber than in any other purpose to which they might be devoted. The entire district is essentially a pulpwood producing section, and it is considered as of the greater importance that a second crop of spruce be secured upon the lands which have been cut.

Left to nature these lands have been found to produce a second crop of balsam rather than of spruce, and it is to correct this tendency that the experimental station at Aleza Lake has been established, the spruce timber having a much greater commercial value than balsam.

It is the first experimental station of its kind to be established in British Columbia and the third in Canada, the other two being located in Ontario. There are eleven similar stations in different sections of the United States.

Zellerbach and Baruh Return From Europe

I. Zellerbach, president and director of the Zellerbach Corporation, and Marcus M. Baruh, director, returned from Europe late in July after a visit that lasted several months. Mrs. Zellerbach accompanied her husband.

The party came to the Pacific Coast via the Canadian Pacific and Vancouver, B. C., stopping off at Seattle briefly for conferences with personnel of the local office in Seattle. After visiting the new plant of the Rainier Pulp and Paper Company, at Shelton, Washington, and Hoquiam, Washington, where the Grays Harbor Pulp Company is under construction, the party returned to San Francisco.

Gatineau Mill Producing 600 Tons

The third machine in the Gatineau newsprint mill of Canadian International Paper Company has started and is now making paper. The fourth machine will start soon.

These machines are designed to make a sheet of paper over twenty-one feet wide at the rate of twenty feet a second. They will have an aggregate capacity of 600 tons of paper a day and are the largest single producers thus far installed in the world.

The Gatineau mill is located in Quebec, on the Ottawa River, two miles below the mouth of the Gatineau River and only five miles from Ottawa.

Install Hog and Chipper

The Hammond Lumber Company, Mill City, Oregon, has installed hog-fuel machinery and a hemlock bark chipper, both of which were put into operation about the middle of last month. These two new by-product plants will utilize much of the waste wood that was formerly burned in the consumer, and will greatly increase the number of carloads. Both new units are electrified throughout. Capacity of the hog-fuel will be about five cars a day, and the chipper five cars a week, according to the Portland office of the company.

Crown-Willamette to Supply Hearst Papers

Approximately \$58,000,000 worth of newsprint has been contracted for by the Hearst newspapers on the Pacific Coast with the Crown-Willamette Paper Company. The contract calls for 200 tons daily, 300 days a year, for a period of ten years. Estimating probable yearly increases in price the total figure will be near that stated above, although the contract is said to provide for a mutual revision of prices annually.

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The Bates Valve Bag Plant
(Continued from Page 20)

Kraft paper for the taping comes from the Nashua River Paper Company of East Pepperell, Massachusetts, the glue from San Francisco and the sewing machines from Chicago.

The plant is equipped with a fire-fighting sprinkler system. There are two monorail hoists for handling stock on the floor. The electrical equipment is from the General Electric Company and the Westinghouse Manufacturing Company.

The Bates company has six plants throughout the United States and Canada and subsidiaries in Australia,



Plenty of Light Is a Feature of the Bates Plant

Japan, Germany, France and England. The plants in this country and Canada have a capacity of 850,000 bags per day. The home office is at 8200 South Chicago Avenue, Chicago, and the plants are located at Los Angeles, Nazareth, Pa.; Covington, Va.; Cap de la Madelaine, Canada; Menominee, Mich., and East Pepperell, Mass.

The Bates company was started by Mr. Bates after he had been working for several years handling bag packing machines. Today these machines are an important output of the Chicago plant and are leased to Bates' customers for filling the Bates bags.

Mr. Weaver is in charge of all manufacturing and sales work in the West and his territory reaches as far east as Edmonton, Denver and El Paso. He has no salesmen on the road, but covers his entire territory twice a year, preaching the advantages of the Bates bags and their superiority over the jute and cloth bags.

"No trouble of shipping our bags back to the cement plant," runs Mr. Weaver's sales talk. "No rejects. No disputes with shipping departments over the number of bags missing."

Mr. Weaver was in the cement business in the East, up to ten years ago, when he joined the Bates forces. Before going with Bates, he was with the Oklahoma Portland Cement Company, the Edison Portland Cement Company and the Edison Portland Cement Company.

The Bates company also manufactures wire bag ties for cloth bags at the Los Angeles plant.

Getting That Forty Per Cent
(Continued from Page 13)

For very long hauls the men favored the idea of working the donkey and tractor in combination, that is, to install the gasoline donkey at the railroad, yarding with it to its maximum range. The tractor then was used for double hauling logs to the donkey tail trees,

from distances farther than can be reached by the donkey working alone. This seems to be an ideal arrangement, when double hauling is necessary, because of the great mobility of the tractor and its ability to assist in rigging the tail trees. (The tail trees were usually small trees that had escaped the original logging operation and were still standing.) Two tractors could, of course, be worked tandem in the same way.

The combination of these three machines seems to be a very efficient arrangement for re-logging work. From present indications the Crown-Willamette paper company feels that the satisfactory results achieved by this combination has almost carried the work out of its experimental stage. The probabilities are that if this work goes on to a permanent basis, which seems quite possible, the company will concentrate on either the tractor or gasoline donkey so as to standardize the equipment. The majority of those in direct charge of the work seem to favor the tractor.

Editor's Note—This is the first of two articles on woods waste, by Mr. Hodgson. The second article will appear in September.

Zellerbach-Paraffine Consolidation Hinted

Rumors of a proposed consolidation of the National Paper Products Company with the board and paper box sections of the Paraffine Companies, Inc., sent the stocks of the interested companies upward on the San Francisco stock exchange in July.

Paraffine stock jumped $9\frac{1}{2}$ points, from $54\frac{1}{2}$ to 64 on the rumor and Zellerbach Corporation, the parent company of the National Paper Products, went up to $34\frac{1}{2}$ from $31\frac{1}{2}$. Activity also was shown in the securities of the Schumacher Wall Board Company, a Paraffine subsidiary.

The rumors were not confirmed, but were not denied very strongly. M. R. Higgins, chairman of the board of directors of the Zellerbach Corporation, said his company had nothing to say about the report and added that no steps toward a consolidation had been taken by July 26. R. H. Ohea, secretary of the Paraffine company said, "As far as I know, there is nothing to it."

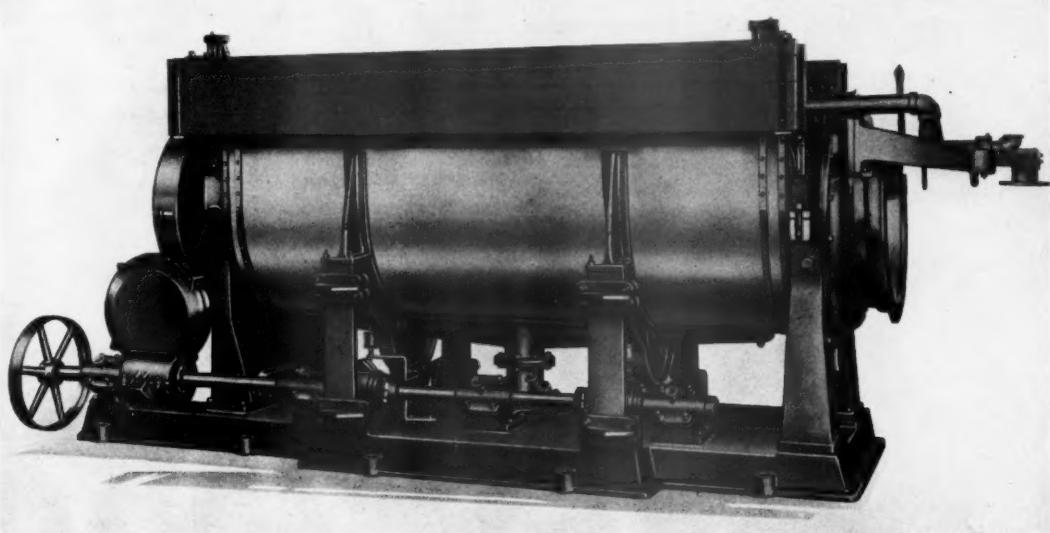
The San Francisco Call published an article quoting an unnamed but "well-informed authority" as stating that there was ground for the consolidation, for such a step would mean lower overhead and greater profits for the two companies. An official of one of the interested companies told PACIFIC PULP AND PAPER INDUSTRY that The Call had the situation summarized "about correct."

The Call said it was proposed to form a new company to take over the National and Paraffine work of manufacturing and selling paper containers. Paraffine and National are competitors now. The Call said it was unknown whether Schumacher would be in the consolidation.

Kenzie Returns to San Francisco

Robert A. Kenzie, consulting engineer for the interests represented by George T. Cameron, San Francisco publisher, who was recently awarded a huge pulp timber unit in Alaska, returned to San Francisco late in July. The purpose of Mr. Kenzie's visit to Alaska was to make preliminary surveys of water power sites in the vicinity of Ketchikan and Juneau with a view to locating the paper mill that the pulp timber award stipulates is to be built.

Mr. Kenzie was accompanied on the survey cruise by B. F. Heintzleman, forest supervisor of the Tongass National Forest.



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Hawley Progress Satisfactory

Satisfactory progress on the \$1,500,000 improvement program under way at the Hawley Pulp & Paper Company, Oregon City, Oregon, is being made, according to R. W. Lee, resident engineer of the V. D. Simons staff of Chicago, who is supervising construction.

The ground wood mill, 66x140 feet, was virtually completed early in the month and equipment was being installed. A part of this structure is 47 feet high, while the distance from the basement to the motor bay is 65 feet, the section being composed of three stories. Also the new rail approach to serve the storage tracks in



R. W. LEE
Resident Engineer, Hawley Pulp & Paper Co.

this department are being built. Connecting with this unit are two loading platforms, 200 feet each in length, which are likewise in readiness.

Ground has been broken for the new extension to the No. 4 machine room. When completed this structure will occupy a total area of 222x38 feet and will be 41 feet high.

Work has also been started on the two-story finishing room and warehouse extension, the dimensions of which are 67x96 feet. This unit will be served by the Southern Pacific railroad, the tracks passing through on the ground floor and into the yard.

Concrete is being poured for the storage tanks.

Erection of the 546 h. p. boiler setting has been finished and installation of the new boiler to replace the two old units is being made.

Some parts of the new paper machine to be installed have been received, and virtually all the equipment to be used in the expansion project is on the road, Mr. Lee said. From present indications finishing touches will be added to all new departments early during the coming winter.

Improvements at Woodfibre

British Columbia Pulp & Paper Company, Ltd., is carrying on an important building program this year,

which represents a total expenditure of more than \$200,000. The work is concentrated at the company's plant at Woodfibre, B. C., where an output of approximately 115 tons of wood pulp daily is being maintained.

In addition to various additions to the plant itself, the company is contemplating the installation of a new water system, according to President Lawrence Killam. The mills now obtain their water supply from two streams, one of which runs practically through the centre of Woodfibre and the other about three miles away. The company proposes to construct a dam or tunnel in order to augment the supply.

The tunnel is expected to cost in the neighborhood of \$20,000. Surveys are being made at present and tenders will be called for, but it is unlikely that an actual start will be made on the project this year as the snowfall was so unusually heavy last winter and the spring so mild that there will be a plentiful supply of water this year without the new facilities.

With the installation of a 300 k.v.a. alternating generator in connection with the big water wheel already in use it is expected that the present plant, even without the projected dam or tunnel, will be able to give the mills a substantial increase in waterpower.

Fifteen hundred horsepower is now being developed and it is hoped that the proposed tunnel will give an additional 1200 horsepower. In the meantime, however, the company has an ample power reserve, for the present season.

Construction crews are now working on a new two-story concrete building to be used for pulp cleaning operations. Its dimensions are approximately 100 by 150. The company is installing an improved system for cleaning wood chips and in this connection an addition is being built on the top of the wood room and under this new apartment will be established a double reciprocating screening system.

The company has completed the building of a new machine shop and a new rotary sulphur burner of the Glen Falls type, manufactured in Canada, is being installed. A new warehouse, started last year at an estimated cost of \$12,000, has been completed. It is located on the wharf and will double the capacity of the accommodation there.

Sherman Rogers Speaks at Raymond

A capacity crowd was expected to hear Sherman Rogers, business publication writer and speaker, at an address scheduled to be made before the Chamber of Commerce at Raymond, Washington, on August 5. Mr. Rogers now has offices at Tacoma, Washington.

Invitations to hear the speaker were sent to civic organizations in the Willapa harbor district, in which Raymond is situated, by Secretary E. C. Richmond of the Raymond chamber.

Raymond, in the heart of the Willapa harbor area, admittedly has many advantages for pulp and paper manufacture, and great interest has been aroused in that city recently with the announcement that a pulp mill is being proposed there.

Crescent Shuts Down Briefly

The machine room of the Crescent Boxboard plant at Port Angeles, was shut down for repairs during a short period over the Fourth of July. Production ceased for seven days, while the work was done. A very satisfactory amount of work was accomplished during the shutdown, Manager Charles Myers of the mill, declared.

ROD MILLS

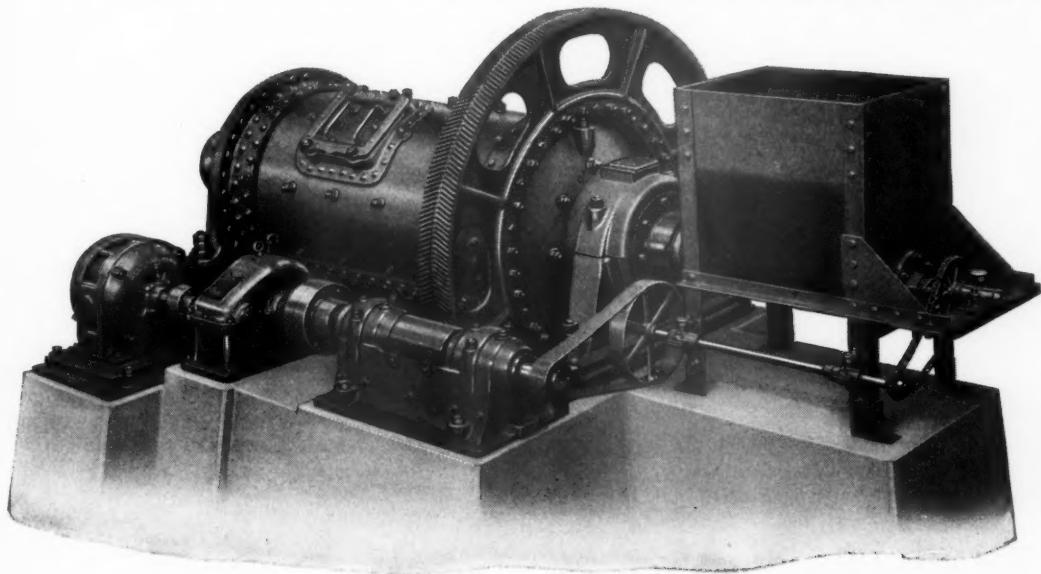
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Killam Guiding B. C. Company

The British Columbia Pulp & Paper Company, formerly the Whalen Pulp & Paper Mills, Ltd., is showing notable improvement financially under the direction of President Lawrence Killam.

Recent months have shown up quite as well as a year ago and the promise is that this situation will continue. The company is steadily improving the quality of its pulp, and there has been some talk, not yet officially confirmed, of the company branching out into the artificial silk business.

The two final months of 1926 and the first two months of the present year were affected to some extent by a falling off in Japanese demand, due to financial unsettlement in that country, but there has been considerable improvement in that market since then. The company has found no difficulty in disposing of its output but, like other concerns, is handicapped to some extent by the relatively low prices prevailing.

The Yaquina Fibre Company, Toledo, Oregon, recently incorporated for \$35,000 by Major A. S. Fairbanks and C. S. Carswell, has signed a five-year contract with the Pacific Spruce Company of that town to

utilize all the waste of the latter, suitable for pulp and paper products. A market is to be found among eastern paper houses.

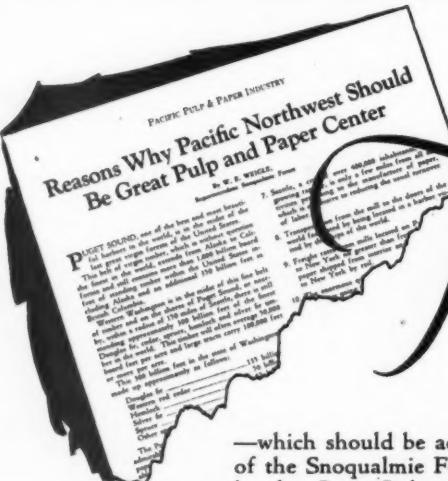
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There is one more Reason,

—which should be added to the eleven given by W. E. Weigle, Superintendent of the Snoqualmie Forest, in his article on, "Why the Pacific Northwest should be the Great Pulp and Paper Center". That reason is the availability of an adequate supply of liquid chlorine or bleach right at the industry's door.

In step with the development of the pulp and paper industry, the Great Western Electro Chemical Co., has expanded its production and distributing facilities. They can assure a supply of liquid chlorine or bleach apace with the industry's requirements.

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